

**Overcoming Impeachment Hurdles: Elite Polarization,
Mass Mobilization and Corruption Scandals**

Online Appendix

16 February 2026

Mahmoud Farag, Isabella C. Montini and Philipp Schemm

Forthcoming in *European Political Science Review*

Contents

Appendix 1: Analytical steps and raw data	3
Appendix 2: Calibration	7
Appendix 3: Set data.....	9
Appendix 4: Skewness tests for set data	11
Appendix 5: Necessity analysis of impeachment	13
Appendix 6: Sufficiency analysis of lower house vote	15
Appendix 7: Sufficiency analysis of removal from office	19
Appendix 8: Deviant coverage cases	22
Appendix 9: Necessity analysis of non-impeachment	24
Appendix 10: Sufficiency analysis of non-impeachment	25
Appendix 11: Sensitivity and fit-oriented robustness tests	30
Appendix 12: Theory evaluation.....	33
Appendix 13: Sufficiency analysis replication using simulated data (Hurdle 2: removal from office).....	39
Appendix 14: Replication of sufficiency analysis using public disapproval	43
Appendix 15: Logistic regression of impeachment hurdles	46
Appendix 16: Illustrative cases of polarized impeachment: Donald Trump (2019 & 2021) and Dilma Rousseff (2016).....	48
Appendix 17: Case study: The non-impeachment of Michel Temer (2017).....	61

Appendix 1: Analytical steps and raw data

Table 1A. Planned analytical steps and robustness tests

	Stage	Issue	Analytical steps & robustness tests
1	Pre-analysis	Use of QCA for non-configurational, non-equifinal research questions	Developing configurational hypotheses
2	Pre-analysis	Ratio of variables to cases is high	Choice of 44 cases for five variables is within the accepted recommendations
3	Pre-analysis	Non-transparent and non-justifiable calibration thresholds	Theoretical and empirical justification for calibration (Results section). Calibration thresholds provided
4	Pre-analysis	Skewness of raw and/or set data, leading to distorted necessity or sufficiency relations	Skewness tests performed on raw and set data show within the acceptable 80:20 threshold (Oana et al., 2021)
5	Analyses	Contradiction to necessity	Necessity analysis carried out before sufficiency analysis for single variables and disjunctions
6	Analyses	Simultaneous subset relations between outcome and non-outcome	Enhanced intermediate solution used
7	Analyses	Consistency threshold for necessity and sufficiency analysis is low	Consistency threshold for necessity 0.9 (RoN: 0.5, Cov: 0.6) and sufficiency above 0.8
8	Post-analysis	Results sensitive to raw consistency thresholds and frequency thresholds	Sensitivity range tests as well as fit-oriented and case-oriented robustness tests are carried out
9	Post-analysis	Empirical results do not match theoretical expectations	Theory evaluation of the hypotheses is carried out
10	Post-analysis	Empirical results are clustered by world region	Cluster analysis is carried out

Raw data

Variable abbreviations: out1 (lower house vote), out2 (removal from office), elip (elite ideological polarization), elap (elite affective polarization), csc a (corruption scandal), les (legislative shield), and mam (mass mobilization).

Country	President	Year	President's party	out 1	out 2	elip	elap	csc a	les	mam
Albania	Ilir Meta	2021	Socialist Movement for Integration	1	0	5.27	0.67	0	-11.66	4999
Brazil	Fernando Collor de Mello	1992	National Reconstruction Party	1	1	5.63	2.91	1	-25.2	860100
Brazil	Dilma Rousseff	2016	Workers' Party	1	1	6.35	2.71	1	-6.76	110706
Brazil	Michel Temer	2017a	Brazilian Democratic Movement Party	0	0	6.35	2.71	1	-20.5	110706
Brazil	Michel Temer	2017 b	Brazilian Democratic Movement Party	0	0	6.35	2.71	1	-20.5	110706
Central African Republic	Ange-Félix Patassé	2002	Movement for the Liberation of the Central African People	0	0	3.62	1.08	0	-9.56	5000
Chile	Sebastián Piñera	2019	National Renewal	0	0	6.23	3.04	0	-20.16	0
Chile	Sebastián Piñera	2021	National Renewal	1	0	6.23	3.04	1	-20.16	0
Czech Republic	Václav Klaus	2013	None	1	0	5.09	3.11	1	-66.66	100000
Czech Republic	Miloš Zeman	2019	Party of Civic Rights	1	0	4.71	3.05	0	-66.66	455505
Ecuador	Abdalá Bucaram	1997	Ecuadorian Roldosist Party	1	1	3.62	2.13	1	-43.46	0
Ecuador	Lucio Gutierrez	2005	Patriotic Society Party	1	1	6.01	1.46	0	-49.66	0
Indonesia	Abdurrahman Wahid	2001	National Awakening Party	1	1	4.70	3.00	1	24.04	11000
Lithuania	Rolandas Paksas	2004	Liberal Democratic Party	1	1	6.08	2.92	1	-21.96	50

Madagascar	Albert Zafy	1996	National Union for Democracy and Development	1	1	5.41	2.12	1	-10.06	1695100
Pakistan	Pervez Musharraf	2008	None	1	1	5.59	1.00	0	-12.76	1200
Paraguay	Raúl Cubas Grau	1999	Colorado Party	1	1	7.57	0.64	0	-10.36	0
Paraguay	Fernando Lugo	2012	Christian Democratic Party	1	1	8.55	1.04	1	-32.86	0
Peru	Pedro Pablo Kuczynski	2017	Peruvians for Change	0	0	7.87	2.48	1	-52.86	0
Peru	Pedro Pablo Kuczynski	2018	Peruvians for Change	1	1	7.87	2.48	1	-19.6	0
Peru	Martín Vizcarra	2019	Peruvians for Change	0	0	7.87	2.48	1	-19.6	0
Peru	Martín Vizcarra	2020	Peruvians for Change	1	1	7.87	2.48	1	-19.6	0
Peru	Pedro Castillo	2021	Free Peru	0	0	7.87	2.48	0	-33.4	0
Peru	Pedro Castillo	2022	Free Peru	1	1	7.87	2.48	1	-33.4	0
Philippines	Joseph Estrada	2000	Force of the Filipino Masses	1	1	7.21	2.70	1	-39.56	258000
Philippines	Gloria Macapagal-Arroyo	2005	Partner of the Free Filipino	0	0	6.95	2.23	1	-3.86	70000
Romania	Ion Iliescu	1994	Romanian Social Democratic Party	0	0	5.33	1.26	0	-23.56	82000
Romania	Traian Basescu	2007	None	1	0	5.87	1.33	0	-66.66	5000
Romania	Traian Basescu	2012	None	1	0	5.72	1.55	0	-66.66	5000
Russia	Boris Yeltsin	1993	None	1	1	4.86	2.56	0	-37.56	10000
Russia	Boris Yeltsin	1997	None	0	0	2.88	2.34	0	-51.96	5000
Russia	Boris Yeltsin	1998	None	0	0	2.88	2.34	0	-66.66	5000
Russia	Boris Yeltsin	1999	None	0	0	3.65	2.60	0	-29.16	5000
South Korea	Roh Moo-hyun	2004	Our Party	1	1	6.54	3.52	1	8.7	10000
South Korea	Park Geun-hye	2016	The Grand National Party	1	1	6.74	3.00	1	7.2	10000
Taiwan	Chen Shui-bian	2006	Democratic Progressive Party	0	0	6.57	2.51	1	-17.36	501250

Ukraine	Viktor Yanukovich	2014	Party of Regions	1	1	6.30	1.55	0	-18.46	1500
United States of America	Bill Clinton	1998	Democratic Party	1	0	6.77	3.00	0	-19.06	0
United States of America	Donald Trump	2019	Republican Party	1	0	6.79	1.99	0	-16.06	0
United States of America	Donald Trump	2021	Republican Party	1	0	6.79	1.99	0	-16.06	0
Venezuela	Carlos Andres Perez	1993	Democratic Action	1	1	5.23	3.00	1	-18.36	0
Zambia	Frederick Chiluba	2001	Movement for Multi-party Democracy	0	0	5.61	1.00	1	20.64	4000
Zambia	Levy Mwanawasa	2003	Movement for Multi-party Democracy	0	0	5.61	1.00	1	-20.66	4000
Zimbabwe	Robert Mugabe	2017	Zimbabwe African National Union - Patriotic Front	1	1	3.27	0.26	0	6.34	50150

Appendix 2: Calibration

In crisp-set QCA, only a cross-over threshold needs to be determined. This is in contrast to fuzzy-set QCA, where a cross-over threshold, in addition to fully-in and fully-out thresholds, needs to be identified. For binary variables (0, 1) such as outcome 1 (i.e., lower house vote), outcome 2 (removal from office) and corruption scandal, the cross-over threshold is naturally 0.5.

For the other variables, calibration needs to be justified based on theoretical grounds. Legislative shield ranges between -66.66 and 24.04 with the cross-over threshold set at 0.1. This means that positive numbers indicate the president's party (and their coalition) has enough legislative seats to block impeachment. This ensures the inclusion of South Korean President Park Geun-hye, who was impeached despite her party holding 7.2% of the seats over the impeachment threshold required by the Constitution. The same applies to elite ideological polarization on a 0 (left ideology) to 10 (right ideology), with 5 being identified as the cross-over threshold. Elite affective polarization's threshold is set at 1.001 to ensure that only elites' severe personal attacks or tactics of demonization against their opponents are considered as polarization when they are used at least "about half of the time", "usually" or "always" to avoid the inclusion of cases when such personal attacks or demonization are less frequent (i.e., "usually not")

or “never”). It is worth noting that we reversed the coding of affective polarization to be interpreted in a way that higher values mean more polarization.

In the case of mass mobilization, a distinction is drawn between negligible participants in protests (less than 10,000 participants over two years) and non-negligible numbers of over 10,000 participants. Examples of small protests include those against Ilir Meta in Albania, who witnessed minimal protests (around 5,000) calling for the political removal of officials. Such a decision is theoretically motivated, given the literature on how protest size has a greater effect and leads to more pressure on both the executive and/or legislative organs (Hager et al., 2022). Our decision is also empirically motivated to mitigate skewed set data, given that 28 cases witnessed no mobilization at all.

Variable	Raw values	Set values (cross-over)
Hurdle 1: Lower house vote	0 (no lower house vote) – 1 (pro-impeachment lower house vote)	0.5
Hurdle 2: Removal from office	0 (non-removal from office) – 1 (removal from office)	0.5
Elite affective polarization	0.4 (high affective polarization) – 3.7 (low polarization)	1.001
Elite ideological polarization	2.87 (low ideological polarization) – 8.55 (high ideological polarization)	5
Legislative shield	-66.66 (no shield) – 24.04 (strong shield)	0.1
Mass mobilization	0 (no mobilization) – 1,695,100 (high mobilization)	10,000
Corruption scandal	0 = no scandal, 1 = scandal	0.5

Appendix 3: Set data

Case	out1	out2	elip	elap	mam	les	cscs
Meta2021	1	0	1	1	0	0	0
Collor_de_Mello1992	1	1	1	1	1	0	1
Rousseff2016	1	1	1	1	1	0	1
Temer2017a	0	0	1	1	1	0	1
Temer2017b	0	0	1	1	1	0	1
Patasse2002	0	0	0	1	0	0	0
Pinera2019	0	0	1	0	0	0	0
Pinera2021	1	0	1	0	0	0	1
Klaus2013	1	0	1	0	1	0	1
Zeman2019	1	0	0	0	1	0	0
Bucaram1997	1	1	0	1	0	0	1
Gutierrez2005	1	1	1	1	0	0	0
Wahid2001	1	1	0	0	1	1	1
Paksas2004	1	1	1	1	0	0	1
Zafy1996	1	1	1	1	1	0	1
Musharraf2008	1	1	1	1	0	0	0
Grau1999	1	1	1	1	0	0	0
Lugo2012	1	1	1	1	0	0	1
Kuczynski2017	0	0	1	1	0	0	1
Kuczynski2018	1	1	1	1	0	0	1
Vizcarra2019	0	0	1	1	0	0	1
Vizcarra2020	1	1	1	1	0	0	1
Castillo2021	0	0	1	1	0	0	0
Castillo2022	1	1	1	1	0	0	1
Estrada2000	1	1	1	1	1	0	1
Macapagal_Arroyo2005	0	0	1	1	1	0	1
Iliescu1994	0	0	1	1	1	0	0
Basescu2007	1	0	1	1	0	0	0
Basescu2012	1	0	1	1	0	0	0
Yeltsin1993	1	1	0	1	1	0	0
Yeltsin1997	0	0	0	1	0	0	0
Yeltsin1998	0	0	0	1	0	0	0
Yeltsin1999	0	0	0	1	0	0	0
Moo_hyun2004	1	1	1	0	1	1	1
Geun_hye2016	1	1	1	0	1	1	1
Sui_Bian2006	0	0	1	1	1	0	1
Yanukovych2014	1	1	1	1	0	0	0

Clinton1998	1	0	1	0	0	0	0
Trump2019	1	0	1	1	0	0	0
Trump2021	1	0	1	1	0	0	0
Perez1993	1	1	1	0	0	0	1
Chiluba2001	0	0	1	1	0	1	1
Mwanawasa2003	0	0	1	1	0	0	1
Mugabe2017	1	1	0	1	1	1	0

Notes: Variable abbreviations are as follows: out1 (lower house vote), out2 (removal from office), elip (elite ideological polarization), elap (elite affective polarization), mam (mass mobilization), les (legislative shield), and csca (corruption scandal).

Appendix 4: Skewness tests for set data

Below, we calculate the percentage of in-set cases after the calibration threshold.

We conduct two sets of skewness tests, given that the number of cases in the first stage (pre-lower house vote) differs from that in the second stage, where only cases that witnessed a positive lower house vote are included in the second-stage analysis. This is done to avoid redundant cases that did not even pass the first hurdle. The distribution of some variables, such as corruption scandals, is somewhat even. Other variables, such as elite ideological and affective polarization, are skewed; however, given the theoretical justification for the calibration explained above, this is understandable. For example, on a 0–10 left-right scale, we chose 5 as the midpoint on the ideological scale as our threshold. The data here indicate that the political parties in the countries under consideration tend to be more right-leaning on the ideological scale. As a robustness test, we replicate the results using different thresholds to demonstrate that our findings are not sensitive to changes in the calibration thresholds.

Hurdle 1: Lower house vote	
Variable	In-set cases
Outcome: Lower house vote	29 / 44 = 65.91 %
Elite affective polarization	35 / 44 = 79.55 %
Elite ideological polarization	35 / 44 = 79.55 %
Legislative shield	5 / 44 = 11.36 %
Mass mobilization	16 / 44 = 36.36 %
Corruption scandal	24 / 44 = 54.55 %
Hurdle 2: Removal from office	
Variable	In-set cases
Outcome: Removal from office	20 / 29 = 68.97 %
Elite affective polarization	21 / 29 = 72.41 %
Elite ideological polarization	24 / 29 = 82.76 %
Legislative shield	4 / 29 = 13.79 %
Mass mobilization	11 / 29 = 37.93 %
Corruption scandal	16 / 29 = 55.17 %

Appendix 5: Necessity analysis of impeachment

Outcome 1: Lower house vote

Single variables

	inclN	RoN	covN
1 elite_ide_polar	0.828	0.450	0.686
2 elite_aff_polar	0.724	0.391	0.600
3 mass_mobilization	0.379	0.848	0.688
4 leg_shield	0.138	0.975	0.800
5 corrupt_scandal	0.552	0.714	0.667
6 ~elite_ide_polar	0.172	0.897	0.556
7 ~elite_aff_polar	0.276	0.972	0.889
8 ~mass_mobilization	0.621	0.615	0.643
9 ~leg_shield	0.862	0.263	0.641
10 ~corrupt_scandal	0.448	0.774	0.650

Disjunctions

There are no combinations with the following cut-off values: incl.cut = 0.9,

ron.cut = 0.5, cov.cut = 0.6

Outcome 2: Removal from office

Single variables

	inclN	RoN	covN
1 elite_ide_polar	0.800	0.385	0.667
2 elite_aff_polar	0.800	0.615	0.762
3 mass_mobilization	0.450	0.900	0.818
4 leg_shield	0.200	1.000	1.000
5 corrupt_scandal	0.700	0.867	0.875
6 ~elite_ide_polar	0.200	0.960	0.800
7 ~elite_aff_polar	0.200	0.840	0.500
8 ~mass_mobilization	0.550	0.611	0.611
9 ~leg_shield	0.800	0.308	0.640
10 ~corrupt_scandal	0.300	0.696	0.462

Disjunctions

	inclN	RoN	covN
1 elite_aff_polar + leg_shield	0.950	0.500	0.792

Appendix 6: Sufficiency analysis of lower house vote

Figure 6A: Polarized lower house vote (Subtype 1)

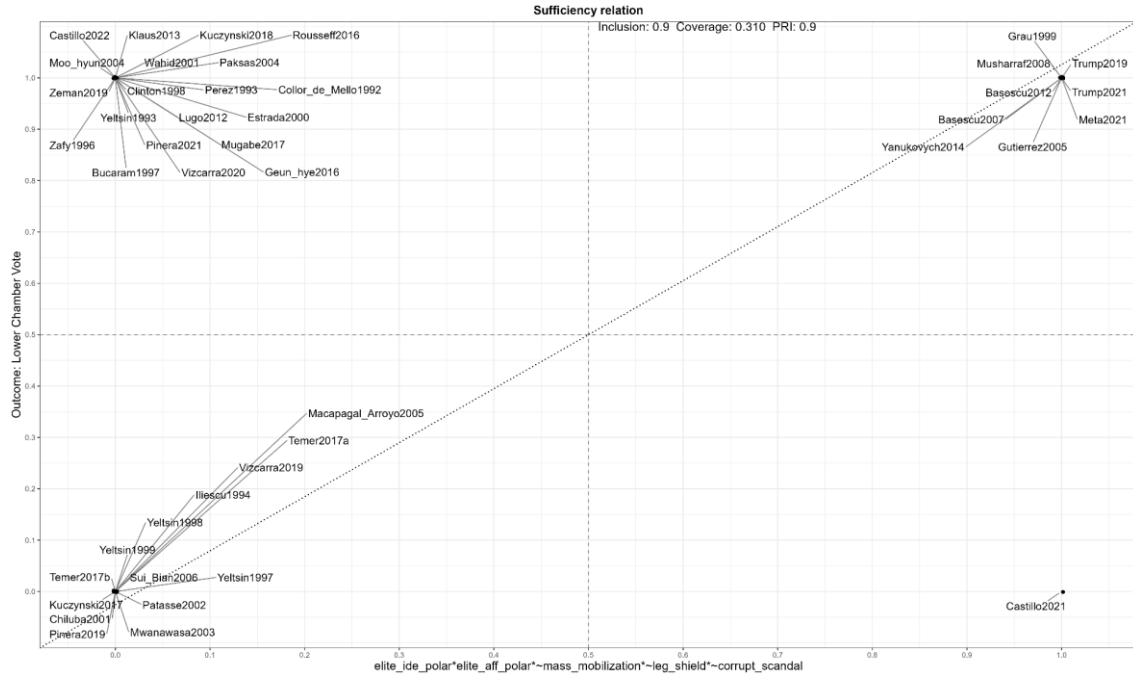


Figure 6B: Polarized lower house vote (Subtype 2)

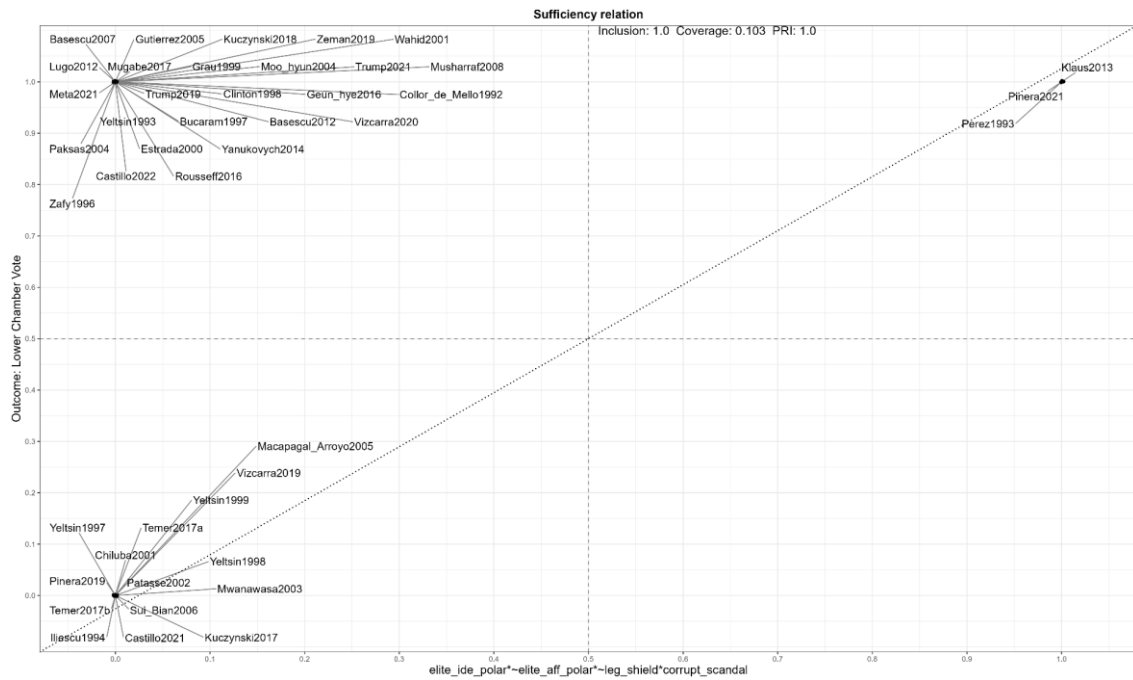


Figure 6C: Polarized lower house vote (Subtype 3)

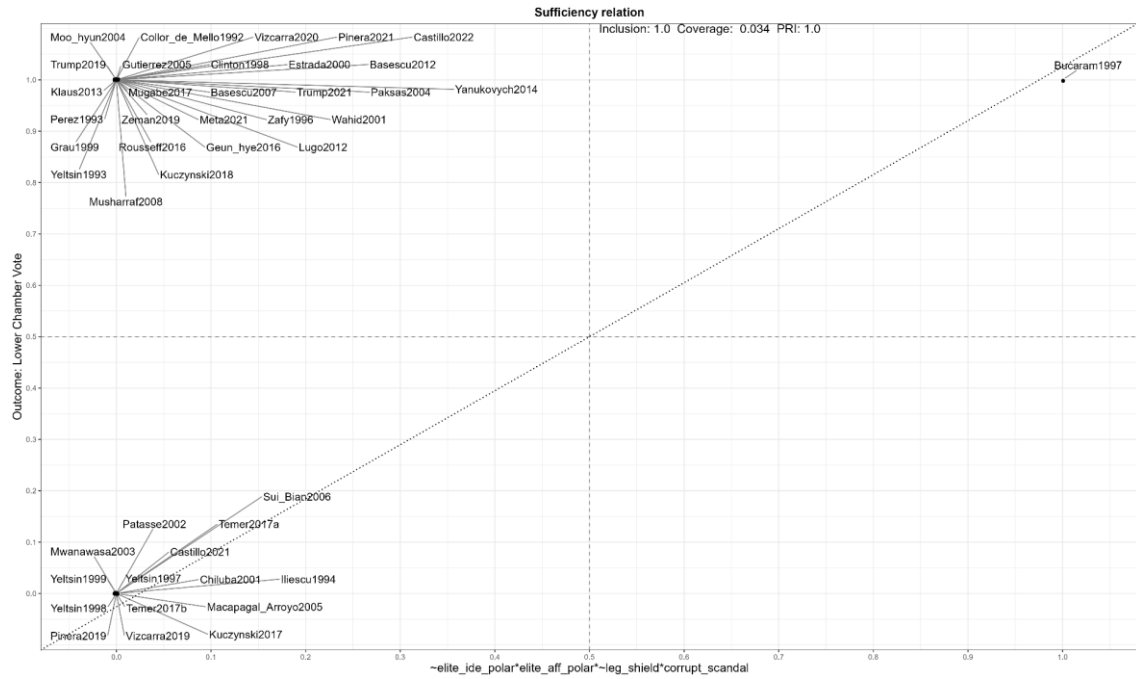


Figure 6D: Polarized lower house vote (Subtype 4)

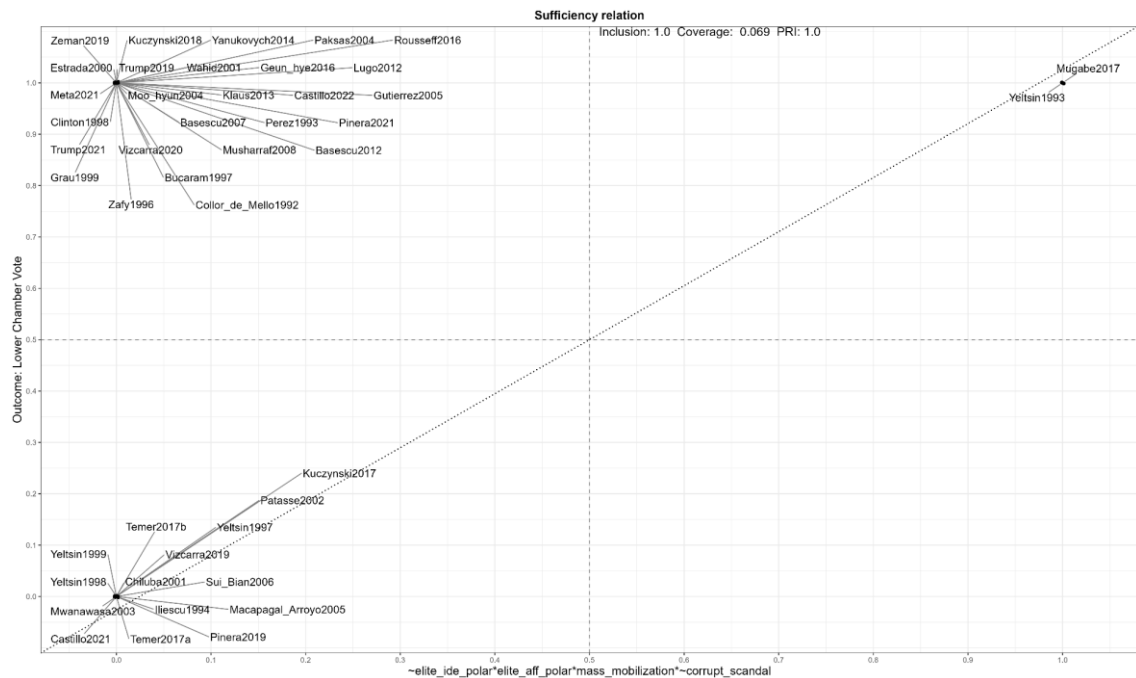


Figure 6E: Scandalized lower house vote

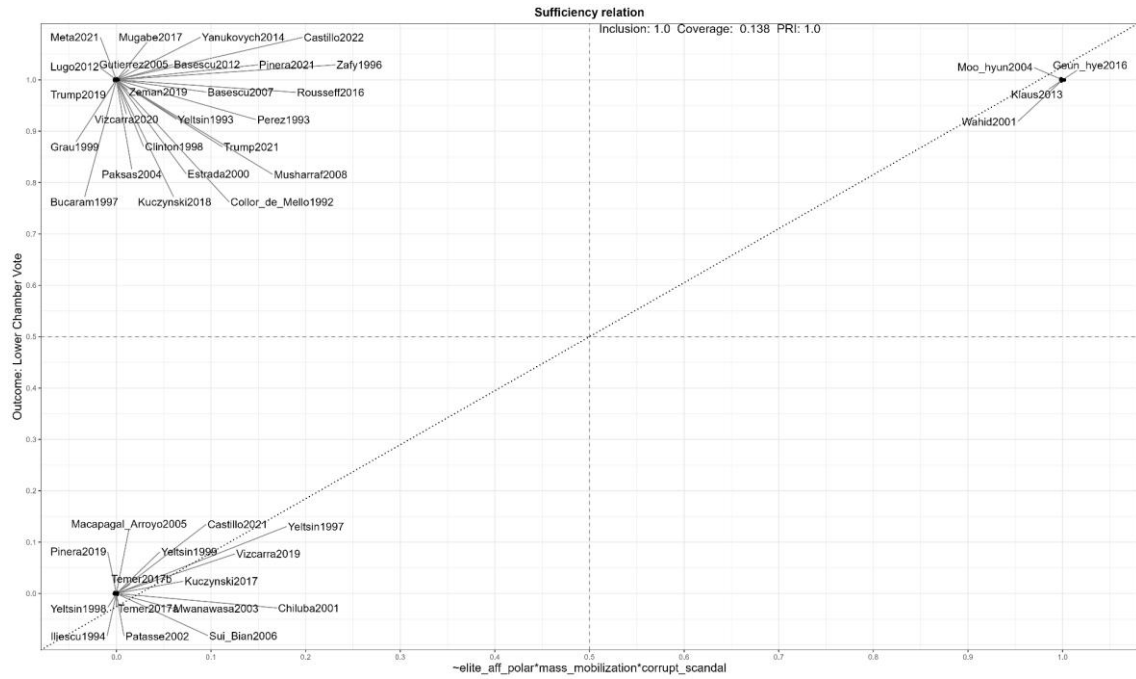
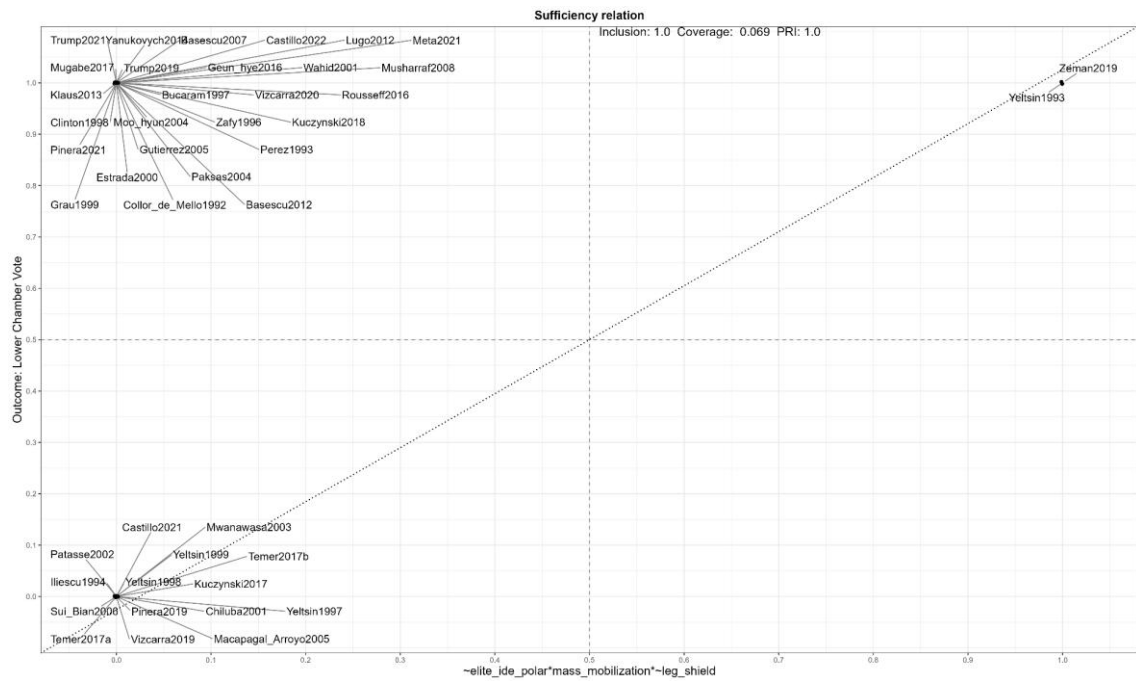


Figure 6F: Mobilized lower house vote



Enhanced parsimonious solution (lower house vote)

M1: $\sim\text{elap}^*\text{mam} + \sim\text{elip}^*\text{mam}^*\sim\text{csca} + \sim\text{elip}^*\sim\text{les}^*\text{csca} + \sim\text{elap}^*\sim\text{les}^*\text{csca} +$
 $\text{elip}^*\text{elap}^*\sim\text{mam}^*\sim\text{les}^*\sim\text{csca} \rightarrow \text{out_lower_chamber_vote}$

	Cons.	PRI	covS	covU
1 $\sim\text{elap}^*\text{mam}$	1.000	1.000	0.172	0.103
2 $\sim\text{elip}^*\text{mam}^*\sim\text{csca}$	1.000	1.000	0.103	0.069
3 $\sim\text{elip}^*\sim\text{les}^*\text{csca}$	1.000	1.000	0.034	0.034
4 $\sim\text{elap}^*\sim\text{les}^*\text{csca}$	1.000	1.000	0.103	0.069
5 $\text{elip}^*\text{elap}^*\sim\text{mam}^*\sim\text{les}^*\sim\text{csca}$	0.900	0.900	0.310	0.310
Full solution	0.950	0.950	0.655	

Cases

- 1 $\sim\text{elap}^*\text{mam}$ Zeman2019, Wahid2001, Klaus2013, Moo_hyun2004, Geun_hye2016
- 2 $\sim\text{elip}^*\text{mam}^*\sim\text{csca}$ Zeman2019, Yeltsin1993, Mugabe2017
- 3 $\sim\text{elip}^*\sim\text{les}^*\text{csca}$ Bucaram1997
- 4 $\sim\text{elap}^*\sim\text{les}^*\text{csca}$ Pinera2021, Perez1993, Klaus2013
- 5 $\text{elip}^*\text{elap}^*\sim\text{mam}^*\sim\text{les}^*\sim\text{csca}$ Meta2021, Gutierrez2005, Musharraf2008, Grau1999, Castillo2021, Basescu2007, Basescu2012, Yanukovych2014, Trump2019, Trump2021

Appendix 7: Sufficiency analysis of removal from office

Figure 7A: Polarized removal from office

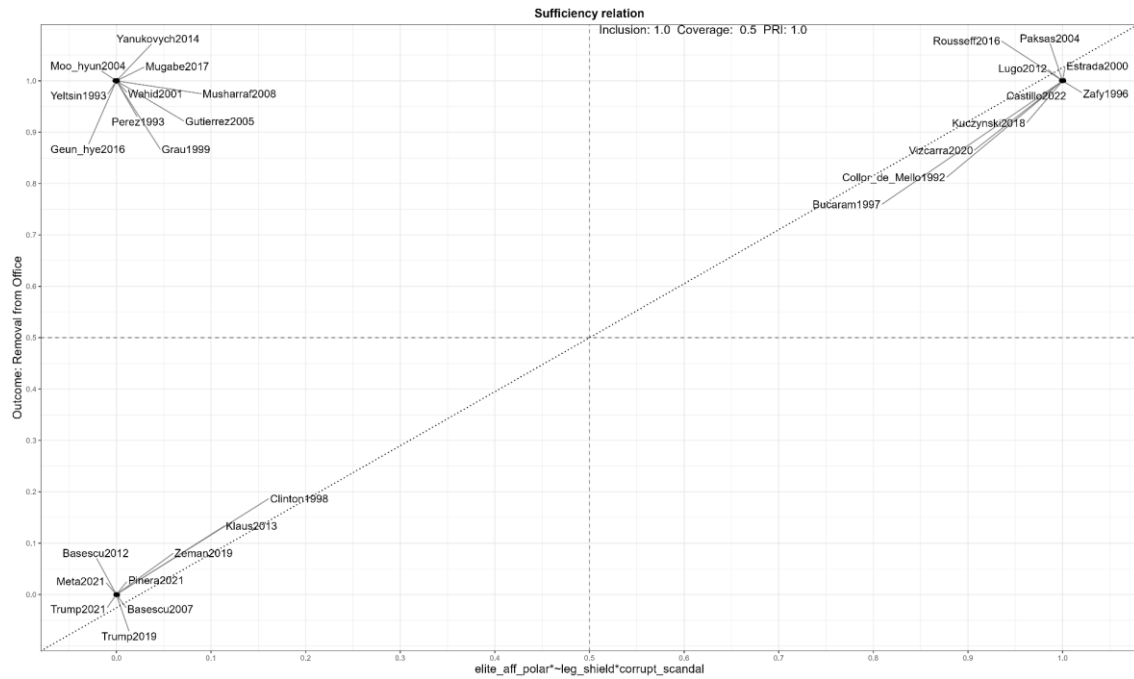


Figure 7B: Mobilized removal from office

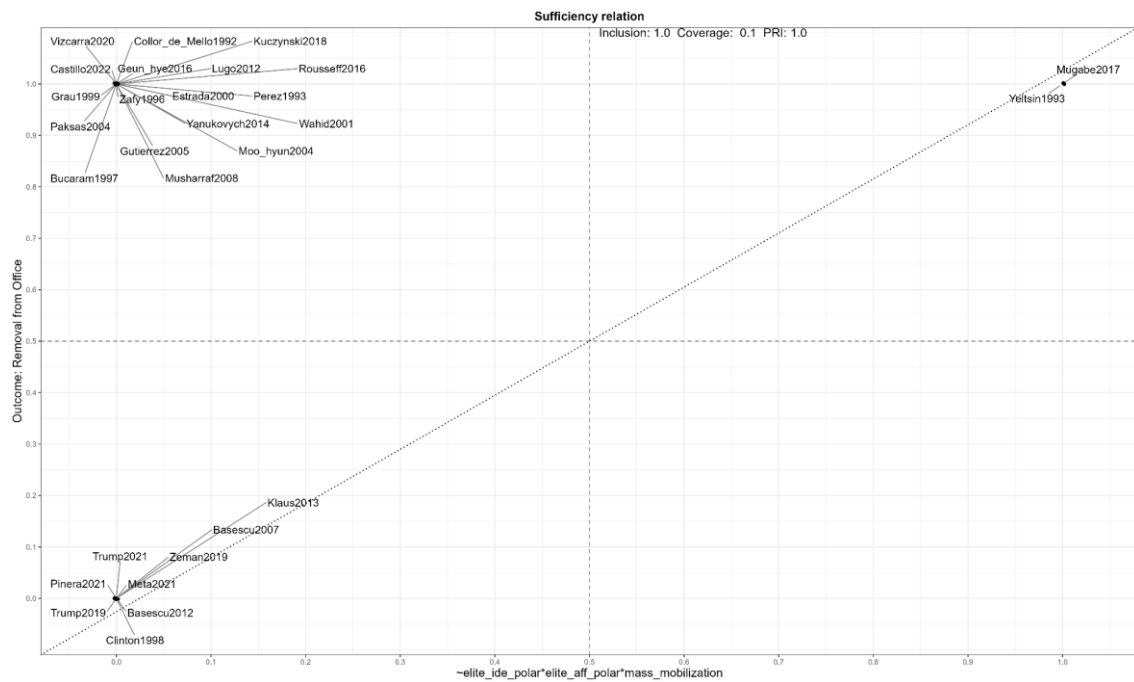
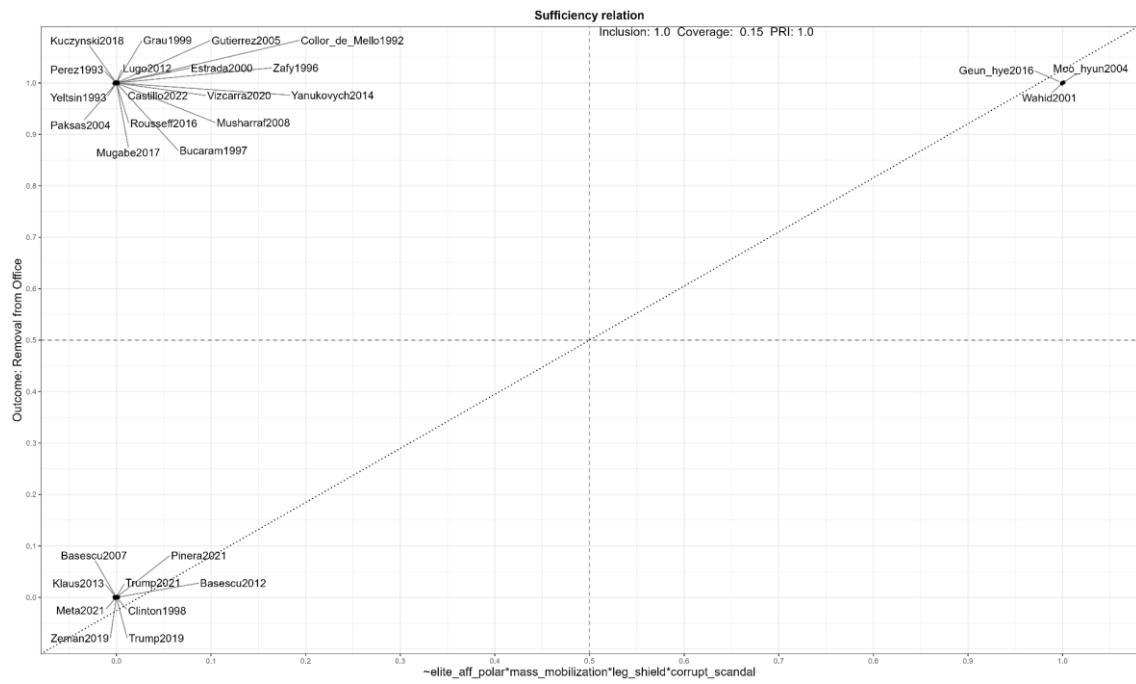


Figure 7C: Scandalized removal from office



Enhanced parsimonious solution (removal from office)

M1: $\text{elap}^*\text{csca} + \text{les}^*\text{csca} + (\sim\text{elip}^*\text{elap}) \rightarrow \text{out_removal}$

M2: $\text{elap}^*\text{csca} + \text{les}^*\text{csca} + (\text{elap}^*\text{mam}) \rightarrow \text{out_removal}$

	Cons.	PRI	covS	covU	(M1)	(M2)
1	elap^*csca	1.000	1.000	0.500	0.250	0.450 0.300
2	les^*csca	1.000	1.000	0.150	0.150	0.150 0.150
3	$\sim\text{elip}^*\text{elap}$	1.000	1.000	0.150	0.000	0.100
4	elap^*mam	1.000	1.000	0.300	0.000	0.100
	M1	1.000	1.000	0.750		
	M2	1.000	1.000	0.750		

Cases

1 elap^*csca Bucaram1997, Paksas2004, Lugo2012, Kuczynski2018,

Vizcarra2020, Castillo2022, Collor_de_Mello1992, Rousseff2016, Zafy1996,

Estrada2000

2 les^*csca Wahid2001, Moo_hyun2004, Geun_hye2016

3 $\sim\text{elip}^*\text{elap}$ Bucaram1997, Yeltsin1993, Mugabe2017

4 elap^*mam Yeltsin1993, Mugabe2017, Collor_de_Mello1992, Rousseff2016,

Zafy1996, Estrada2000

Appendix 8: Deviant coverage cases

This section presents the scores for the unexplained cases in both outcomes on three variables: economic crisis, presidential powers, and electoral democracy. This aims to show that their non-explanation is not due to the omission of particular variables from the analysis. We present the scores below, along with an explanation of how we operationalize each of these variables.

Economic crisis

- Mean of percentage change in GDP per capita, PPP (current international \$) over three years (i.e., two years before (non-)impeachment, along with the year of impeachment).
- Source: GDP per capita, PPP (current international \$) variable, World Development Indicators

Presidential power

- Coding: 0 = low presidential powers, 1 = high presidential powers (Source: prespow2 dataset)

Electoral democracy index

- Coding: 0 = low democracy, 1 = high (Source: V-Dem, v2x_polyarchy)

Hurdle 1: Lower house vote

Case	Economic crisis	Presidential power	Electoral democracy
Clinton (1998)	4.6	0.344	0.87
Castillo (2022)	2.5	0.53	0.74
Kuczynski (2018)	4.2	0.53	0.80
Lugo (2012)	3.8	0.24	0.61
Paksas (2004)	11.3	0.38	0.82
Vizcarra (2020)	-1.5	0.53	0.81
Collor de Mello (1992)	1.3	0.69	0.84
Estrada (2000)	1.6	0.4	0.59
Rousseff (2016)	-2.8	0.69	0.74
Zafy (1996)	0.08	0.4	0.55

Hurdle 1: Removal from office

Case	Economic crisis	Presidential power	Electoral democracy
Perez (1993)	5.7	0.25	0.75
Grau (1999)	0.2	0.245	0.54
Gutierrez (2005)	6.2	0.83	0.7
Musharraf (2008)	4.5	0.53	0.4
Yanukovich (2014)	5.3	0.7	0.4

Appendix 9: Necessity analysis of non-impeachment

Outcome 1: Anti-impeachment lower house vote

Single conditions

	inclN	RoN	covN
1 elite_ide_polar	0.733	0.273	0.314
2 elite_aff_polar	0.933	0.300	0.400
3 mass_mobilization	0.333	0.718	0.312
4 leg_shield	0.067	0.907	0.200
5 corrupt_scandal	0.533	0.556	0.333
6 ~elite_ide_polar	0.267	0.875	0.444
7 ~elite_aff_polar	0.067	0.814	0.111
8 ~mass_mobilization	0.667	0.471	0.357
9 ~leg_shield	0.933	0.167	0.359
10 ~corrupt_scandal	0.467	0.649	0.350

Disjunctions: There are no disjunctions using the following cut-off values: incl.cut = 0.9, ron.cut = 0.5, cov.cut = 0.6

Outcome 2: Non-removal from office

Single conditions

	inclN	RoN	covN
1 elite_ide_polar	0.889	0.238	0.333
2 elite_aff_polar	0.556	0.333	0.238
3 mass_mobilization	0.222	0.667	0.182
4 leg_shield	0.000	0.862	0.000
5 corrupt_scandal	0.222	0.481	0.125
1 ~elite_ide_polar	0.111	0.857	0.200
2 ~elite_aff_polar	0.444	0.840	0.500
3 ~mass_mobilization	0.778	0.500	0.389
4 ~leg_shield	1.000	0.200	0.360
5 ~corrupt_scandal	0.778	0.727	0.538

Disjunctions: There are no disjunctions using the following cut-off values: incl.cut = 0.9, ron.cut = 0.5, cov.cut = 0.6

Appendix 10: Sufficiency analysis of non-impeachment

Outcome 1: Anti-impeachment lower house vote (Truth table)

#	elip	elap	mam	les	cscs	Out	N	Cons	PRI	Cases
28	1	1	0	1	1	1	1	1	1	Chiluba2001
29	1	1	1	0	0	1	1	1	1	Iliescu1994
17	1	0	0	0	0	0	2	0.5	0.5	Pinera2019, Clinton1998
30	1	1	1	0	1	0	8	0.5	0.5	Collor_de_Mello1992, Rousseff2016, Temer2017a, Temer2017b, Zafy1996, Estrada2000, Macapagal_Arroyo2005, Sui_Bian2006
26	1	1	0	0	1	0	8	0.375	0.375	Paksas2004, Lugo2012, Kuczynski2017, Kuczynski2018, Vizcarra2019, Vizcarra2020, Castillo2022, Mwanawasa2003
25	1	1	0	0	0	0	10	0.1	0.1	Meta2021, Gutierrez2005, Musharraf2008, Grau1999, Castillo2021, Basescu2007, Basescu2012, Yanukovich2014, Trump2019, Trump2021
9	0	1	0	0	0	1	4	1	1	Patasse2002, Yeltsin1997, Yeltsin1998, Yeltsin1999
5	0	0	1	0	0	0	1	0	0	Zeman2019
8	0	0	1	1	1	0	1	0	0	Wahid2001
10	0	1	0	0	1	0	1	0	0	Bucaram1997
13	0	1	1	0	0	0	1	0	0	Yeltsin1993
15	0	1	1	1	0	0	1	0	0	Mugabe2017
22	1	0	1	0	1	0	1	0	0	Klaus2013
18	1	0	0	0	1	0	2	0	0	Pinera2021, Perez1993
24	1	0	1	1	1	0	2	0	0	Moo_hyun2004, Geun_hye2016
4	0	0	0	1	1	0	0	-	-	
12	0	1	0	1	1	0	0	-	-	
16	0	1	1	1	1	0	0	-	-	
20	1	0	0	1	1	0	0	-	-	
27	1	1	0	1	0	0	0	-	-	
1	0	0	0	0	0	?	0	-	-	
2	0	0	0	0	1	?	0	-	-	
3	0	0	0	1	0	?	0	-	-	
6	0	0	1	0	1	?	0	-	-	
7	0	0	1	1	0	?	0	-	-	
11	0	1	0	1	0	?	0	-	-	
14	0	1	1	0	1	?	0	-	-	
19	1	0	0	1	0	?	0	-	-	

21	1	0	1	0	0	?	0	-	-	
23	1	0	1	1	0	?	0	-	-	
31	1	1	1	1	0	?	0	-	-	
32	1	1	1	1	1	?	0	-	-	

Notes: Consistency threshold = 0.9. N frequency = 1. Abbreviations are as follows: elip (elite ideological polarization), elap (elite affective polarization), mam (mass mobilization), les (legislative shield), csca (corruption scandal), out (anti-impeachment lower house vote). N (number of cases), Cons. (consistency), PRI (proportional reduction of necessity). (*) refers to deviant consistency cases.

Enhanced intermediate solution (outcome: anti-impeachment lower house vote)

M1: elip*elap*mam*~csca + ~elip*elap*~mam*~csca + elip*elap*~mam*les*csca -> ~out_lower_chamber_vote

	Cons.	PRI	covS	covU
1 elip*elap*mam*~csca	1.000	1.000	0.067	0.067
2 ~elip*elap*~mam*~csca	1.000	1.000	0.267	0.267
3 elip*elap*~mam*les*csca	1.000	1.000	0.067	0.067
M1	1.000	1.000	0.400	

Cases

- 1 elip*elap*mam*~csca Iliescu1994
- 2 ~elip*elap*~mam*~csca Patasse2002,Yeltsin1997,Yeltsin1998,Yeltsin1999
- 3 elip*elap*~mam*les*csca Chiluba2001

Enhanced parsimonious solution (outcome: anti-impeachment lower house vote)

M1: elip*mam*~csca + ~elip*~mam*~csca + elip*elap*les*csca -> ~out_lower_chamber_vote

	Cons.	PRI	covS	covU
1 elip*mam*~csca	1.000	1.000	0.067	0.067
2 ~elip*~mam*~csca	1.000	1.000	0.267	0.267
3 elip*elap*les*csca	1.000	1.000	0.067	0.067
M1	1.000	1.000	0.400	

Cases

- 1 elip*mam*~csca Iliescu1994
- 2 ~elip*~mam*~csca Patasse2002,Yeltsin1997,Yeltsin1998,Yeltsin1999
- 3 elip*elap*les*csca Chiluba2001

Outcome 2: Non-Removal from office (Truth table)

#	elip	elap	mam	les	csca	OUT	N	Cons.	PRI	Cases
5	0	0	1	0	0	1	1	1	1	Zeman2019
17	1	0	0	0	0	1	1	1	1	Clinton1998
22	1	0	1	0	1	1	1	1	1	Klaus2013
25	1	1	0	0	0	0	9	0.55	0.55	Meta2021, Gutierrez2005, Musharraf2008, Grau1999, Basescu2007, Basescu2012, Yanukovych2014, Trump2019, Trump2021
18	1	0	0	0	1	0	2	0.5	0.5	Pinera2021, Perez1993
26	1	1	0	0	1	0	5	0	0	Paksas2004, Lugo2012, Kuczynski2018, Vizcarra2020, Castillo2022
30	1	1	1	0	1	0	4	0	0	Collor_de_Mello1992, Rousseff2016, Zafy1996, Estrada2000
24	1	0	1	1	1	0	2	0	0	Moo_hyun2004, Geun_hye2016
8	0	0	1	1	1	0	1	0	0	Wahid2001
10	0	1	0	0	1	0	1	0	0	Bucaram1997
13	0	1	1	0	0	0	1	0	0	Yeltsin1993
15	0	1	1	1	0	0	1	0	0	Mugabe2017
3	0	0	0	1	0	0	0	-	-	
7	0	0	1	1	0	0	0	-	-	
19	1	0	0	1	0	0	0	-	-	
23	1	0	1	1	0	0	0	-	-	
1	0	0	0	0	0	?	0	-	-	
2	0	0	0	0	1	?	0	-	-	
4	0	0	0	1	1	?	0	-	-	
6	0	0	1	0	1	?	0	-	-	
9	0	1	0	0	0	?	0	-	-	
11	0	1	0	1	0	?	0	-	-	
12	0	1	0	1	1	?	0	-	-	
14	0	1	1	0	1	?	0	-	-	
16	0	1	1	1	1	?	0	-	-	
20	1	0	0	1	1	?	0	-	-	
21	1	0	1	0	0	?	0	-	-	
27	1	1	0	1	0	?	0	-	-	
28	1	1	0	1	1	?	0	-	-	
29	1	1	1	0	0	?	0	-	-	
31	1	1	1	1	0	?	0	-	-	
32	1	1	1	1	1	?	0	-	-	

Notes: Consistency threshold = 1.0. N frequency = 1. Abbreviations are as follows: elip (elite ideological polarization), elap (elite affective polarization), mam (mass mobilization), les (legislative shield), csca (corruption scandal), out (non-removal from office). N (number of cases), Cons. (consistency), PRI (proportional reduction of necessity). (*) refers to deviant consistency cases.

Enhanced intermediate solution (outcome: non-removal from office)

M1: $\sim\text{elap}^*\sim\text{les}^*\sim\text{corrupt_scandal} + *\sim\text{elap}^*\text{mam}^*\sim\text{les} \rightarrow \sim\text{out_removal}$

	Cons.	PRI	covS	covU
1 $\sim\text{elap}^*\sim\text{les}^*\sim\text{corrupt_scandal}$	1.000	1.000	0.222	0.222
2 $\text{elip}^*\sim\text{elap}^*\text{mam}^*\sim\text{les}$	1.000	1.000	0.111	0.111
M1	1.000	1.000	0.333	

Cases

1 $\sim\text{elap}^*\sim\text{les}^*\sim\text{corrupt_scandal}$	Zeman2019; Clinton1998
2 $\text{elip}^*\sim\text{elap}^*\text{mam}^*\sim\text{les}$	Klaus2013

Enhanced parsimonious solution (outcome: non-removal from office)

M1: $\sim\text{elap}^*\text{mam}^*\sim\text{les} + \sim\text{elap}^*\sim\text{les}^*\sim\text{corrupt_scandal} \rightarrow \sim\text{out_removal}$

	Cons.	PRI	covS	covU
1 $\sim\text{elap}^*\text{mam}^*\sim\text{les}$	1.000	1.000	0.222	0.111
2 $\sim\text{elap}^*\sim\text{les}^*\sim\text{corrupt_scandal}$	1.000	1.000	0.222	0.111
M1	1.000	1.000	0.333	

Cases

1 $\sim\text{elap}^*\text{mam}^*\sim\text{les}$	Zeman2019; Klaus2013
2 $\sim\text{elap}^*\sim\text{les}^*\sim\text{corrupt_scandal}$	Zeman2019; Clinton1998

Appendix 11: Sensitivity and fit-oriented robustness tests

Sensitivity tests are used to examine the degree to which the results are sensitive to changes in the consistency, frequency, or calibration thresholds. We report these in the table below. The results stand all the robustness tests except for the consistency and frequency cut-off tests. Additionally, the fit-oriented robustness test reveals a high degree of overlap (0.95 for outcome 1 and 0.67 for outcome 2) between the original enhanced intermediate solution and the test solution after adjusting the calibration of elite affective polarization and elite ideological polarization.

Robustness test	Result
<i>Outcome 1: Lower house vote</i>	
Raw consistency robustness	Lower bound NA, Threshold 0.9, Upper bound 0.9
Frequency cut-off robustness	Lower bound 1, Threshold 1, Upper bound 1
Sensitivity range calibration: mass mobilization	Lower bound 6000, Threshold 10000, Upper bound NA
Sensitivity range calibration: elite affective polarization	Lower bound 1.001, Threshold 1.001, Upper bound 1.401
Sensitivity range calibration: elite ideological polarization	Lower bound 4.8, Threshold 5, Upper bound 5.2
Fit-oriented robustness	RF_cov (0.948), RF_cons (1.0), RF_SC_minTS (0.905), RF_SC_maxTS (0.905)
<i>Outcome 2: Removal from office</i>	
Raw consistency robustness	Not relevant given the highest possible consistency (i.e., 1.0) used
Frequency cut-off robustness	Lower bound 1, Threshold 1, Upper bound 1
Sensitivity range calibration: mass mobilization	Lower bound 1000, Threshold 10000, Upper bound NA
Sensitivity range calibration: elite affective polarization	Lower bound 1.001, Threshold 1.001, Upper bound 1.401
Sensitivity range calibration: elite ideological polarization	Lower bound 4.9, Threshold 5, Upper bound 5.2
Fit-oriented robustness	RF_cov (0.667), RF_cons (1.0), RF_SC_minTS (0.667), RF_SC_maxTS (0.667)

Note: Sensitivity tests are not relevant for corruption scandals, as this is a binary variable. The same also applies to the legislative shield, considering the lack of theoretical justifications for increasing the threshold over the legislative majority required by the Constitution.

Figure 11A: Fit-oriented robustness test for pro-impeachment lower house vote

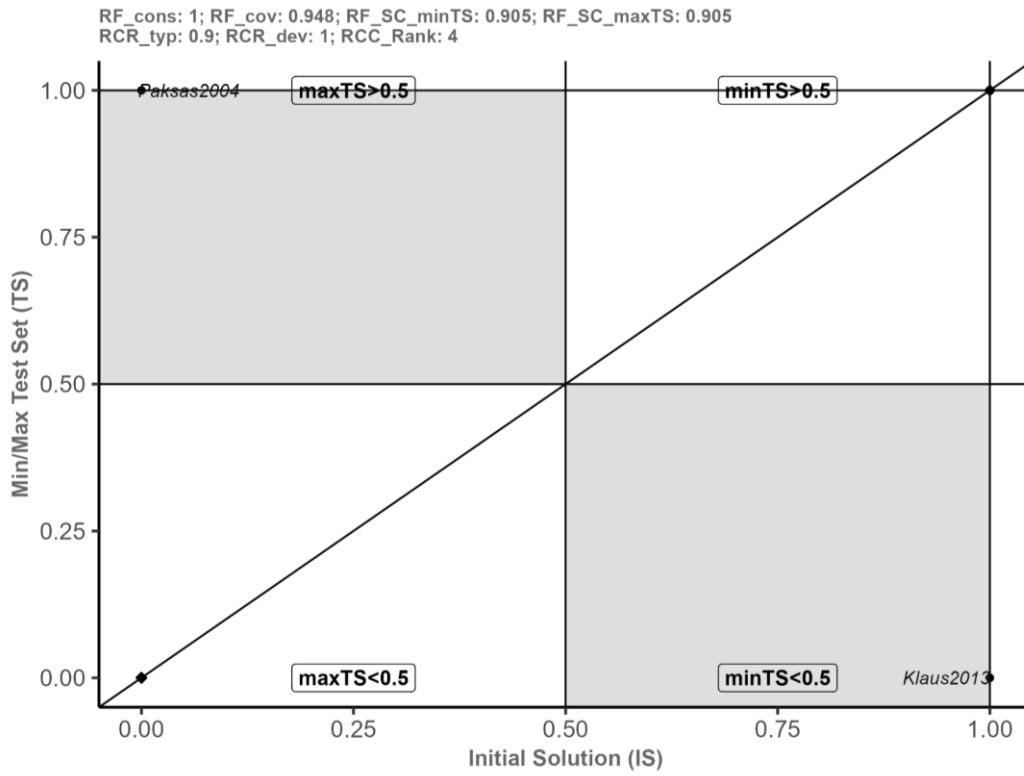
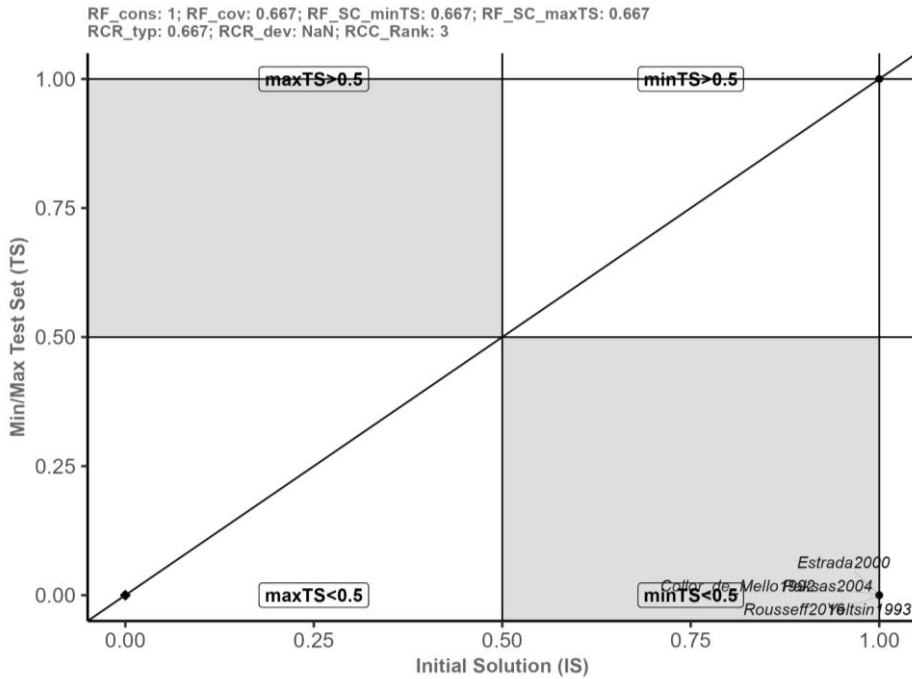


Figure 11B: Fit-oriented robustness test for removal from office



Appendix 12: Theory evaluation

Outcome 1: Pro-impeachment lower house vote

Case Parameters

	RCR_typ	RCR_dev	RCC_Rank
Robustness_Case_Ratio	0.9	1	4

Case Types

Robust Typical Cases (IS*MIN_TS and Y > 0.5):

Boolean Expression: corrupt_scandal*elite_aff_polar*~elite_ide_polar*~leg_shield + ~corrupt_scandal*elite_aff_polar*~elite_ide_polar*leg_shield*mass_mobilization + ~corrupt_scandal*elite_aff_polar*elite_ide_polar*~leg_shield*~mass_mobilization + corrupt_scandal*~elite_aff_polar*elite_ide_polar*~leg_shield*~mass_mobilization + corrupt_scandal*~elite_aff_polar*elite_ide_polar*leg_shield*mass_mobilization

Cases in the intersection/Total number of cases: 18 / 44 = 40.91 %

Cases in the intersection/Total number of cases Y > 0.5: 18 / 29 = 62.07 %

Case Names:

Meta2021 Pinera2021 Zeman2019 Bucaram1997 Gutierrez2005 Wahid2001
Musharraf2008 Grau1999 Basescu2007 Basescu2012 Yeltsin1993 Moo_hyun2004
Geun_hye2016 Yanukovych2014 Trump2019 Trump2021 Perez1993 Mugabe2017

Robust Deviant Cases (IS*MIN_TS and Y < 0.5):

Boolean Expression: corrupt_scandal*elite_aff_polar*~elite_ide_polar*~leg_shield + ~corrupt_scandal*elite_aff_polar*~elite_ide_polar*leg_shield*mass_mobilization + ~corrupt_scandal*elite_aff_polar*elite_ide_polar*~leg_shield*~mass_mobilization + corrupt_scandal*~elite_aff_polar*elite_ide_polar*~leg_shield*~mass_mobilization + corrupt_scandal*~elite_aff_polar*elite_ide_polar*leg_shield*mass_mobilization

Cases in the intersection/Total number of cases: 1 / 44 = 2.27 %

Cases in the intersection/Total number of cases Y < 0.5: 1 / 15 = 6.67 %

Case Names:

Castillo2021

Shaky Typical Cases (IS*~MIN_TS and Y > 0.5):

Boolean Expression:

~corrupt_scandal*~elite_ide_polar*~leg_shield*mass_mobilization +
corrupt_scandal*~elite_aff_polar*~elite_ide_polar*mass_mobilization +
corrupt_scandal*~elite_aff_polar*~leg_shield*mass_mobilization +
~elite_aff_polar*~elite_ide_polar*~leg_shield*mass_mobilization

Cases in the intersection/Total number of cases: 1 / 44 = 2.27 %

Cases in the intersection/Total number of cases Y > 0.5: 1 / 29 = 3.45 %

Case Names:

Klaus2013

Shaky Deviant Cases(IS*~MIN_TS and Y < 0.5):

Boolean Expression:

~corrupt_scandal*~elite_ide_polar*~leg_shield*mass_mobilization +
corrupt_scandal*~elite_aff_polar*~elite_ide_polar*mass_mobilization +
corrupt_scandal*~elite_aff_polar*~leg_shield*mass_mobilization +
~elite_aff_polar*~elite_ide_polar*~leg_shield*mass_mobilization

Cases in the intersection/Total number of cases: 0 / 44 = 0 %

Cases in the intersection/Total number of cases Y < 0.5: 0 / 15 = 0 %

Case Names:

No cases in this intersection

Possible Typical Cases (~IS*MAX_TS and Y > 0.5):

Boolean Expression:

elite_ide_polar*~elite_aff_polar*mass_mobilization*~leg_shield*~corrupt_scandal

Cases in the intersection/Total number of cases: 1 / 44 = 2.27 %

Cases in the intersection/Total number of cases Y > 0.5: 1 / 29 = 3.45 %

Case Names:

Paksas2004

Possible Deviant Cases ($\sim IS * MAX_TS$ and $Y < 0.5$):

Boolean Expression:

elite_ide_polar*~elite_aff_polar*mass_mobilization*~leg_shield*~corrupt_scandal

Cases in the intersection/Total number of cases: 0 / 44 = 0 %

Cases in the intersection/Total number of cases $Y < 0.5$: 0 / 15 = 0 %

Case Names:

No cases in this intersection

Extreme Deviant Coverage Cases ($\sim IS * \sim MAX_TS$ and $Y > 0.5$):

Boolean Expression: ~mass_mobilization*leg_shield +
~elite_ide_polar*~elite_aff_polar*~mass_mobilization +
~elite_ide_polar*~mass_mobilization*~corrupt_scandal +
elite_ide_polar*elite_aff_polar*mass_mobilization +
elite_ide_polar*elite_aff_polar*leg_shield +
elite_ide_polar*elite_aff_polar*corrupt_scandal +
elite_ide_polar*leg_shield*~corrupt_scandal +
~elite_aff_polar*~mass_mobilization*~corrupt_scandal +
~elite_aff_polar*leg_shield*~corrupt_scandal +
elite_aff_polar*leg_shield*corrupt_scandal

Cases in the intersection/Total number of cases: 9 / 44 = 20.45 %

Cases in the intersection/Total number of cases $Y > 0.5$: 9 / 29 = 31.03 %

Case Names:

Collor_de_Mello1992 Rousseff2016 Zafy1996 Lugo2012 Kuczynski2018 Vizcarra2020
Castillo2022 Estrada2000 Clinton1998

Irrelevant Cases ($\sim IS * \sim MAX_TS$ and $Y < 0.5$):

Boolean Expression: ~mass_mobilization*leg_shield +
~elite_ide_polar*~elite_aff_polar*~mass_mobilization +
~elite_ide_polar*~mass_mobilization*~corrupt_scandal +
elite_ide_polar*elite_aff_polar*mass_mobilization +
elite_ide_polar*elite_aff_polar*leg_shield +
elite_ide_polar*elite_aff_polar*corrupt_scandal +
elite_ide_polar*leg_shield*~corrupt_scandal +
~elite_aff_polar*~mass_mobilization*~corrupt_scandal +

~elite_aff_polar*leg_shield*~corrupt_scandal +
elite_aff_polar*leg_shield*corrupt_scandal

Cases in the intersection/Total number of cases: $14 / 44 = 31.82 \%$

Cases in the intersection/Total number of cases $Y < 0.5$: $14 / 15 = 93.33 \%$

Case Names:

Temer2017a Temer2017b Patasse2002 Pinera2019 Kuczynski2017 Vizcarra2019
Macapagal_Arroyo2005 Iliescu1994 Yeltsin1997 Yeltsin1998 Yeltsin1999 Sui_Bian2006
Chiluba2001 Mwanawasa2003

Outcome 2: Removal from office

CaseParameters

	RCR_typ	RCR_dev	RCC_Rank
Robustness_Case_Ratio	0.667	NaN	3

CaseTypes

Robust Typical Cases (IS*MIN_TS and $Y > 0.5$):

Boolean Expression: corrupt_scandal*elite_aff_polar*~leg_shield +
elite_aff_polar*~elite_ide_polar*leg_shield*mass_mobilization +
corrupt_scandal*~elite_aff_polar*elite_ide_polar*leg_shield*mass_mobilization

Cases in the intersection/Total number of cases: $10 / 29 = 34.48 \%$

Cases in the intersection/Total number of cases $Y > 0.5$: $10 / 20 = 50 \%$

Case Names:

Bucaram1997 Wahid2001 Zafy1996 Lugo2012 Kuczynski2018 Vizcarra2020 Castillo2022
Moo_hyun2004 Geun_hye2016 Mugabe2017

Robust Deviant Cases (IS*MIN_TS and $Y < 0.5$):

Boolean Expression: corrupt_scandal*elite_aff_polar*~leg_shield +
elite_aff_polar*~elite_ide_polar*leg_shield*mass_mobilization +
corrupt_scandal*~elite_aff_polar*elite_ide_polar*leg_shield*mass_mobilization

Cases in the intersection/Total number of cases: $0 / 29 = 0 \%$

Cases in the intersection/Total number of cases $Y < 0.5$: $0 / 9 = 0 \%$

Case Names:

No cases in this intersection

Shaky Typical Cases ($IS^* \sim MIN_TS$ and $Y > 0.5$):

Boolean Expression:

$\sim corrupt_scandal * elite_aff_polar * \sim elite_ide_polar * \sim leg_shield * mass_mobilization +$
 $corrupt_scandal * \sim elite_aff_polar * \sim elite_ide_polar * leg_shield * mass_mobilization$

Cases in the intersection/Total number of cases: $5 / 29 = 17.24 \%$

Cases in the intersection/Total number of cases $Y > 0.5$: $5 / 20 = 25 \%$

Case Names:

Collor_de_Mello1992 Rousseff2016 Paksas2004 Estrada2000 Yeltsin1993

Shaky Deviant Cases($IS^* \sim MIN_TS$ and $Y < 0.5$):

Boolean Expression:

$\sim corrupt_scandal * elite_aff_polar * \sim elite_ide_polar * \sim leg_shield * mass_mobilization +$
 $corrupt_scandal * \sim elite_aff_polar * \sim elite_ide_polar * leg_shield * mass_mobilization$

Cases in the intersection/Total number of cases: $0 / 29 = 0 \%$

Cases in the intersection/Total number of cases $Y < 0.5$: $0 / 9 = 0 \%$

Case Names:

No cases in this intersection

Possible Typical Cases ($\sim IS^* MAX_TS$ and $Y > 0.5$):

Boolean Expression:

Cases in the intersection/Total number of cases: $0 / 29 = 0 \%$

Cases in the intersection/Total number of cases $Y > 0.5$: $0 / 20 = 0 \%$

Case Names:

No cases in this intersection

Possible Deviant Cases (~IS*MAX_TS and Y < 0.5):

Boolean Expression:

Cases in the intersection/Total number of cases: 0 / 29 = 0 %

Cases in the intersection/Total number of cases Y < 0.5: 0 / 9 = 0 %

Case Names:

No cases in this intersection

Extreme Deviant Coverage Cases (~IS*~MAX_TS and Y > 0.5):

Boolean Expression: elite_ide_polar*~corrupt_scandal +
~elite_aff_polar*~mass_mobilization + ~elite_aff_polar*~leg_shield +
~elite_aff_polar*~corrupt_scandal + ~mass_mobilization*leg_shield +
~mass_mobilization*~corrupt_scandal + elite_ide_polar*elite_aff_polar*leg_shield

Cases in the intersection/Total number of cases: 5 / 29 = 17.24 %

Cases in the intersection/Total number of cases Y > 0.5: 5 / 20 = 25 %

Case Names:

Gutierrez2005 Musharraf2008 Grau1999 Yanukovych2014 Perez1993

Irrelevant Cases (~IS*~MAX_TS and Y < 0.5):

Boolean Expression: elite_ide_polar*~corrupt_scandal +
~elite_aff_polar*~mass_mobilization + ~elite_aff_polar*~leg_shield +
~elite_aff_polar*~corrupt_scandal + ~mass_mobilization*leg_shield +
~mass_mobilization*~corrupt_scandal + elite_ide_polar*elite_aff_polar*leg_shield

Cases in the intersection/Total number of cases: 9 / 29 = 31.03 %

Cases in the intersection/Total number of cases Y < 0.5: 9 / 9 = 100 %

Case Names:

Meta2021 Pinera2021 Klaus2013 Zeman2019 Basescu2007 Basescu2012 Clinton1998
Trump2019 Trump2021

Appendix 13: Sufficiency analysis replication using simulated data

(Hurdle 2: removal from office)

Table 13A: Simulated set data

case	out3	elip	elap	mam	les	csca
Meta2021	0	1	1	0	0	0
Collor_de_Mello1992	1	1	1	1	0	1
Rousseff2016	1	1	1	1	0	1
Pinera2021	0	1	0	0	0	1
Klaus2013	0	1	0	1	0	1
Zeman2019	0	0	0	1	0	0
Bucaram1997	1	0	1	0	0	1
Gutierrez2005	1	1	1	0	0	0
Wahid2001	1	0	0	1	1	1
Paksas2004	1	1	1	0	0	1
Zafy1996	1	1	1	1	0	1
Musharraf2008	1	1	1	0	0	0
Grau1999	1	1	1	0	0	0
Lugo2012	1	1	1	0	0	1
Kuczynski2018	1	1	1	0	0	1
Vizcarra2020	1	1	1	0	0	1
Castillo2022	1	1	1	0	0	1
Estrada2000	1	1	1	1	0	1
Basescu2007	0	1	1	0	0	0
Basescu2012	0	1	1	0	0	0
Yeltsin1993	1	0	1	1	0	0
Moo_hyun2004	1	1	0	1	1	1
Geun_hye2016	1	1	0	1	1	1
Yanukovych2014	1	1	1	0	0	0
Clinton1998	0	1	0	0	0	0
Trump2019	0	1	1	0	0	0
Trump2021	0	1	1	0	0	0
Perez1993	1	1	0	0	0	1
Mugabe2017	1	0	1	1	1	0
Meta2021_sim	0	1	1	0	0	0
Collor_de_Mello1992_sim	0	1	1	0	0	0
Rousseff2016_sim	0	1	1	0	0	0
Temer2017a_sim	0	1	1	0	0	0
Temer2017b_sim	0	1	1	0	0	0
Patasse2002_sim	0	0	1	0	0	0

Pinera2019_sim	0	1	0	0	0	0
Pinera2021_sim	0	1	0	0	0	0
Klaus2013_sim	0	1	0	0	0	0
Zeman2019_sim	0	0	0	0	0	0
Bucaram1997_sim	0	0	1	0	0	0
Gutierrez2005_sim	0	1	1	0	0	0
Wahid2001_sim	0	0	0	0	1	0
Paksas2004_sim	0	1	1	0	0	0
Zafy1996_sim	0	1	1	0	0	0
Musharraf2008_sim	0	1	1	0	0	0
Grau1999_sim	0	1	1	0	0	0
Lugo2012_sim	0	1	1	0	0	0
Kuczynski2017_sim	0	1	1	0	0	0
Kuczynski2018_sim	0	1	1	0	0	0
Vizcarra2019_sim	0	1	1	0	0	0
Vizcarra2020_sim	0	1	1	0	0	0
Castillo2021_sim	0	1	1	0	0	0
Castillo2022_sim	0	1	1	0	0	0
Estrada2000_sim	0	1	1	0	0	0
Macapagal_Arroyo2005_sim	0	1	1	0	0	0
Iliescu1994_sim	0	1	1	0	0	0
Basescu2007_sim	0	1	1	0	0	0
Basescu2012_sim	0	1	1	0	0	0
Yeltsin1993_sim	0	0	1	0	0	0
Yeltsin1997_sim	0	0	1	0	0	0
Yeltsin1998_sim	0	0	1	0	0	0
Yeltsin1999_sim	0	0	1	0	0	0
Moo_hyun2004_sim	0	1	0	0	1	0
Geun_hye2016_sim	0	1	0	0	1	0
Sui_Bian2006_sim	0	1	1	0	0	0
Yanukovych2014_sim	0	1	1	0	0	0
Clinton1998_sim	0	1	0	0	0	0
Trump2019_sim	0	1	1	0	0	0
Trump2021_sim	0	1	1	0	0	0
Perez1993_sim	0	1	0	0	0	0
Chiluba2001_sim	0	1	1	0	1	0
Mwanawasa2003_sim	0	1	1	0	0	0
Mugabe2017_sim	0	0	1	0	1	0

Notes: Variable abbreviations are as follows: out1 (lower house vote), out2 (removal from office), elip (elite ideological polarization), elap (elite affective polarization), mam (mass mobilization), les (legislative shield), and csca (corruption scandal).

Enhanced intermediate analysis for removal from office

M: $\sim\text{elip}^*\text{elap}^*\text{mam} + \text{elap}^*\sim\text{les}^*\text{csca} + \text{elap}^*\text{mam}^*\text{les}^*\text{csca} \rightarrow \text{out_removal}$

	Cons.	PRI	covS	covU
1 $\sim\text{elip}^*\text{elap}^*\text{mam}$	1.000	1.000	0.100	0.100
2 $\text{elap}^*\sim\text{les}^*\text{csca}$	1.000	1.000	0.500	0.500
3 $\sim\text{elap}^*\text{mam}^*\text{les}^*\text{csca}$	1.000	1.000	0.150	0.150
Full solution	1.000	1.000	0.750	

Cases

1 $\sim\text{elip}^*\text{elap}^*\text{mam}$	Yeltsin1993, Mugabe2017
2 $\text{elap}^*\sim\text{les}^*\text{csca}$	Bucaram1997, Paksas2004, Lugo2012, Kuczynski2018, Vizcarra2020, Castillo2022, Collor_de_Mello1992, Rouseff2016, Zafy1996, Estrada2000
3 $\sim\text{elap}^*\text{mam}^*\text{les}^*\text{csca}$	Wahid2001, Moo_hyun2004, Geun_hye2016

Enhanced intermediate analysis for non-removal from office

M: ~elip*~mam*~csca + elap*~les*~csca + ~mam*les*~csca +
*~elap*mam*~les -> ~out_removal

	Cons.	PRI	covS	covU
1 ~elip*~mam*~csca	1.000	1.000	0.170	0.113
2 ~elap*~les*~csca	1.000	1.000	0.151	0.132
3 ~mam*les*~csca	1.000	1.000	0.094	0.057
4 elip*~elap*mam*~les	1.000	1.000	0.019	0.019
Full solution	1.000	1.000	0.377	

Cases

1 ~elip*~mam*~csca

Zeman2019_sim, Wahid2001_sim, Patasse2002_sim, Bucaram1997_sim,
Yeltsin1993_sim, Yeltsin1997_sim, Yeltsin1998_sim, Yeltsin1999_sim,
Mugabe2017_sim

2 ~elap*~les*~csca

Zeman2019_sim, Zeman2019, Clinton1998, Pinera2019_sim, Pinera2021_sim,
Klaus2013_sim, Clinton1998_sim, Perez1993_sim

3 ~mam*les*~csca

Wahid2001_sim, Mugabe2017_sim, Moo_hyun2004_sim, Geun_hye2016_sim,
Chiluba2001_sim

4 elip*~elap*mam*~les

Klaus2013

Appendix 14: Replication of sufficiency analysis using public disapproval

Data on public disapproval

	country	president	year	Executive disapproval (%)
1	Brazil	Fernando Collor de Mello	1992	54.72
2	Brazil	Dilma Rousseff	2016	50.93
3	Brazil	Michel Temer	2017a	62.66
4	Brazil	Michel Temer	2017b	62.66
5	Chile	Sebastián Piñera	2019	53.15
6	Chile	Sebastián Piñera	2021	63.95
7	Czech Republic	Václav Klaus	2013	51.44
8	Czech Republic	Miloš Zeman	2019	71.84
9	Ecuador	Abdalá Bucaram	1997	45.35
10	Ecuador	Lucio Gutierrez	2005	51.64
11	Pakistan	Pervez Musharraf	2008	58.78
12	Paraguay	Raúl Cubas Grau	1999	62.544
13	Paraguay	Fernando Lugo	2012	34.208
14	Peru	Pedro Pablo Kuczynski	2017	58.844
15	Peru	Pedro Pablo Kuczynski	2018	48.066
16	Peru	Martín Vizcarra	2019	44.453
17	Peru	Martín Vizcarra	2020	36.231
18	Peru	Pedro Castillo	2021	59.449
19	Philippines	Joseph Estrada	2000	43.265
20	Philippines	Gloria Macapagal-Arroyo	2005	65.016
21	Romania	Traian Basescu	2012	66.659
22	Russia	Boris Yeltsin	1997	49.130
23	Russia	Boris Yeltsin	1998	53.757
24	Russia	Boris Yeltsin	1999	58.25
25	South Korea	Roh Moo-hyun	2004	54.11
26	South Korea	Park Geun-hye	2016	54.85
27	Taiwan	Chen Shui-bian	2006	69.8
28	Ukraine	Viktor Yanukovych	2014	33.73
29	United States of America	Bill Clinton	1998	44.146
30	United States of America	Donald Trump	2019	58.784
31	United States of America	Donald Trump	2021	48.198
32	Venezuela	Carlos Andres Perez	1993	35.98

Source: Executive Approval Database

Enhanced intermediate solution for lower house vote

	inclS	PRI	covS	covU
1 elite_ide_polar*~exec_disapprov*~leg_shield	0.889	0.889	0.381	0.095
2 ~elite_ide_polar*~elite_aff_polar*exec_disapprov*~leg_shield	1.000	1.000	0.048	0.048
3 elite_ide_polar*~elite_aff_polar*exec_disapprov*corrupt_scandal	1.000	1.000	0.190	0.190
4 elite_ide_polar*elite_aff_polar*~leg_shield*~corrupt_scandal	0.875	0.875	0.333	0.238
5 elite_aff_polar*~exec_disapprov*~leg_shield*corrupt_scandal	0.833	0.833	0.238	0.048
Full solution	0.905	0.905	0.905	

Cases

1) elite_ide_polar*~exec_disapprov*~leg_shield

Clinton1998, Perez1993, Yanukovych2014, Trump2021, Lugo2012, Kuczynski2018, Vizcarra2019, Vizcarra2020, Estrada2000

2) ~elite_ide_polar*~elite_aff_polar*exec_disapprov*~leg_shield

Zeman2019

3) elite_ide_polar*~elite_aff_polar*exec_disapprov*corrupt_scandal

Pinera2021, Klaus2013, Moo_hyun2004, Geun_hye2016

4) elite_ide_polar*elite_aff_polar*~leg_shield*~corrupt_scandal

Yanukovych2014, Trump2021, Gutierrez2005, Musharraf2008, Grau1999, Castillo2021, Basescu2012, Trump2019

5) elite_aff_polar*~exec_disapprov*~leg_shield*corrupt_scandal

Bucaram1997, Lugo2012, Kuczynski2018, Vizcarra2019, Vizcarra2020, Estrada2000

Enhanced intermediate solution for removal from office

	inclS	PRI	covS	covU
1 elite_aff_polar*~leg_shield*corrupt_scandal	1.000	1.000	0.500	0.214
2 elite_ide_polar*~exec_disapprov*~leg_shield*corrupt_scandal	1.000	1.000	0.357	0.071
3 elite_ide_polar*~elite_aff_polar*exec_disapprov*leg_shield *corrupt_scandal	1.000	1.000	0.143	0.143
Full solution	1.000	1.000	0.714	

Cases

1) elite_aff_polar*~leg_shield*corrupt_scandal

Bucaram1997, Lugo2012, Kuczynski2018, Vizcarra2020, Estrada2000, Collor_de_Mello1992, Rousseff2016

2) elite_ide_polar*~exec_disapprov*~leg_shield*corrupt_scandal

Perez1993, Lugo2012, Kuczynski2018, Vizcarra2020, Estrada2000

3) elite_ide_polar*~elite_aff_polar*exec_disapprov*leg_shield*corrupt_scandal

Moo_hyun2004, Geun_hye2016

Appendix 15: Logistic regression of impeachment hurdles

	Hurdle 1: Lower House Vote					Hurdle 2: Removal from Office				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Elite ideological polarization	0.149	0.530	0.163	-0.084	0.027	-0.043	-0.022	-0.011	-0.134	-0.294
	(0.282)	(0.401)	(0.299)	(0.441)	(0.303)	(0.291)	(0.394)	(0.315)	(0.413)	(0.341)
Elite affective polarization	-0.105	-0.035	1.035	-0.073	1.338	0.184	0.190	1.306	0.214	1.800*
	(0.454)	(0.475)	(0.665)	(0.459)	(1.159)	(0.461)	(0.467)	(0.801)	(0.471)	(1.032)
Corruption scandal	-0.140	4.809	-5.814**	-0.267	-0.235	1.210	1.459	-3.225	1.166	1.275
	(0.835)	(3.448)	(2.605)	(0.867)	(0.863)	(0.828)	(3.248)	(2.265)	(0.843)	(0.911)
Legislative shield	0.001	-0.003	-0.008	0.0004	0.008	0.023	0.023	0.018	0.023	0.035*
	(0.015)	(0.016)	(0.018)	(0.016)	(0.017)	(0.017)	(0.017)	(0.018)	(0.017)	(0.021)
Mass mobilization (log)	-0.039	-0.033	-0.071	-0.308	-0.530	-0.052	-0.052	-0.079	-0.171	-0.668**
	(0.074)	(0.079)	(0.081)	(0.386)	(0.358)	(0.074)	(0.075)	(0.078)	(0.381)	(0.332)
Elite affective polarization X corruption scandal			-2.644**					-2.205**		
			(1.107)					(1.074)		
Elite ideological polarization X mass mobilization (log)				0.043					0.019	
				(0.061)					(0.060)	
Elite affective polarization X mass mobilization (log)					-0.197					-0.248*
					(0.137)					(0.128)
Elite ideological polarization X corruption scandal		-0.829						-0.041		
		(0.550)						(0.515)		
Constant	-0.088	-2.111	1.896	1.635	4.477	0.650	0.534	2.301	1.368	6.409*
	(2.037)	(2.571)	(2.377)	(3.244)	(3.863)	(2.118)	(2.579)	(2.388)	(3.127)	(3.786)
Observations	44	44	44	44	44	44	44	44	44	44
Log Likelihood	-27.650	-26.421	-24.066	-27.387	-26.316	-27.102	-27.099	-24.647	-27.051	-24.677
Akaike Inf. Crit.	67.299	66.842	62.132	68.773	66.632	66.203	68.197	63.295	68.102	63.354

Note: * p < 0.05 ** p < 0.01 *** p < 0.001

We would like to point out that, given the small sample, the results need to be carefully interpreted. Given that we theorize impeachment in the revised manuscript as a multi-hurdle process, we report results for both outcomes: lower house vote and removal from office. Models 1 and 6 are the base models without any interaction effects, while models 2 – 5 and models 7 – 10 report interaction effects. A few observations are in order. First, elite ideological polarization correlates positively with lower house vote and negatively with removal from office. The opposite applies to elite affective polarization, which correlates negatively with lower house vote and positively with removal from office. In some ways, this is in line with the results reported in Table 4 in the main text, where affective polarization only contributes to removal from office. However, neither ideological nor affective polarization is statistically significant. Second, in terms of the interaction effects, only elite ideological polarization and mass mobilization correlate positively with both lower house vote and removal from office. In contrast, the other interactions are negatively correlated with both hurdles.

Appendix 16: Illustrative cases of polarized impeachment: Donald Trump (2019 & 2021) and Dilma Rousseff (2016)

The impeachment of Donald Trump in 2019 and 2021

The impeachment trials of Donald Trump in 2019 represent polarized impeachment (subtype 1) for being mainly driven by elite affective and ideological polarization and the absence of a legislative shield in the House. Trump was the first U.S. president to be impeached twice. In the words of Iyengar (2021: 98), “heightened polarization has made it almost impossible for partisans to abandon their party’s candidates.” In a “hyperpolarized” climate, as in the United States, impeachment is pushed by the out-group, Democrats in this case, which leads the in-group Republicans to defend the president regardless of the grounds for impeachment (Hollis-Brusky, 2021).

The first impeachment in December 2019 centered around allegations that Trump had abused his power by soliciting foreign interference in the 2020 presidential election, specifically by pressuring Ukraine to investigate Joe Biden and his son Hunter. This was rooted in a phone call that Trump had in July 2019 with newly elected Ukrainian President Volodymyr Zelensky, in which Trump presumably conditioned military aid to Ukraine on the announcement of politically beneficial investigations. Trump was also charged with obstruction of Congress for blocking investigation efforts. However, getting the impeachment trial off the ground was an uneasy process. For a long time, House Speaker Nancy Pelosi has resisted mounting calls from her Democratic Party fellows to approve impeachment inquiries against Trump. In the words of Pelosi, “The facts drove the timing and the decision...and that’s what I’ve said all along — when we get the facts, we will

be ready. And we're ready" (Heather Caygle, Bresnahan, John et al., 2019).

Polarization was evident in how both the Democratic and Republican parties viewed the case. On the one hand, Democrats viewed Trump's request for Ukraine to investigate Joe Biden as a clear abuse of presidential power. On the other hand, Republicans defended the president's actions as legitimate exercises of executive discretion, framing the inquiry as a politically-motivated process. In fact, "Donald Trump inspired the most polarized presidential job approval ratings in modern American history, but his new record was only the latest extension of a long-term trend" (Jacobson, 2020: 763).

At the time, the Democrats controlled the House of Representatives with 233 seats out of 435, leading to a vote largely along party lines: 230-197 in favor of impeachment. However, the Republican-controlled Senate (53 Republicans out of 100 seats) acquitted Trump, with only one Republican, Mitt Romney, breaking ranks to vote for conviction on one of the articles.¹ Such partisan alignment showed how the impeachment was used as a "partisan" weapon rather than a tool of accountability.

The second impeachment occurred in January 2021, following the storming of the U.S. Capitol by Trump supporters on January 6, itself a manifestation of clear partisan polarization and rivalry (Myrick & Wang, 2024). The charge this time was "incitement of insurrection," asserting that Trump had incited the violent attack aimed at overturning the 2020 election results. Again, there was divergent

¹ House Resolution 755, 160th Congress:

<https://www.congress.gov/116/bills/hres755/BILLS-116hres755enr.pdf>

partisan disagreement on how to characterize Trump's involvement in the January 6 insurrection. Whereas Democrats viewed it as a direct attack on democracy, Republicans were more cautious and conservative in their interpretation of the events, with many following Trump's rhetoric in highlighting electoral fraud. In the words of Gerhardt (2022: 767),

Perhaps the most important option for leaders and lawyers is to make clear to everyone what higher power(s) they serve, especially when the Congress and nation face possible constitutional crises. Is it their party and their own political ambitions, or is it the institution to which they have been elected, the clients they represent, and the Constitution and rule of law? It should be incumbent for every official to make crystal clear the principles, not the party, that they serve. The deep polarization of the American people, leading to deep polarization in Congress, makes such reforms unlikely, unless or until voters from both parties agree on the importance of having representatives and senators who are able not to see each other as enemies of the republic but instead as partners, who are genuinely committed to working together for the common good of the United States.

This does not negate the fact that there has been a concerted effort by the Democrats to rally Republicans around impeachment by emphasizing constitutional duty and the protection of democratic institutions. House Speaker Pelosi, for instance, called Trump "a clear and present danger to the nation that we all love" (Mangan, 2021). Democrats such as Representative Jamie Raskin of Maryland highlighted that the attack had targeted Congress itself, threatening the lives of Republican and Democratic members alike. This led to a number of Republicans deciding to vote for impeachment including Liz Cheney, House Republican Conference Chair.

The House, still under Democratic control, swiftly moved to impeach with a 232-197 vote, including support from 10 Republicans. Despite this bipartisan support

in the House, the Senate, evenly split 50-50 but controlled by Democrats through Vice President Kamala Harris's tie-breaking vote, fell short of the two-thirds majority required to convict, with a 57-43 vote. Justifying their vote, many Republican Senators said they could not punish a president who had already left office, despite having the ability to make him ineligible for future re-election. Trump celebrated his acquittal by saying that his impeachment was part of a “witch hunt.” A similar polarization trend could also be observed at the mass level, with support for (or opposition to) impeaching Trump following partisan lines regardless of the facts of the case (Bose & Burnett, 2022). In short, the deep polarization increased loyalty to party lines in the U.S. Senate, thereby shaping the outcomes of both Trump's impeachment trials (Jacobson, 2020; Healy, 2022).

The impeachment of Dilma Rousseff in 2016

The impeachment of Dilma Rousseff was prompted by the Petrobras corruption scandal and occurred under the shadow of elite affective polarization. Rousseff's impeachment proceedings took place in a context of high ideological polarization between the right and left at both mass and elite levels (Moreira et al., 2020). Polarization was not, nonetheless, an outcome of the impeachment but part of a social opening with the massive protests in June 2013 that led to the emergence of right and left-wing groups with mostly opposed societal visions (Bringel & Pleyers, 2019; Vrydagh & Jiménez-Martínez, 2020). For example, Aécio Neves, from the PSDB, refused to accept his loss against Rousseff in the 2014 presidential run-off elections and tried to interrupt the PT's fourth consecutive term in power, alleging that he was defeated by a "criminal organization" (Limongi, 2015; Nunes & Melo, 2017). This polarization manifested itself in the sweeping victory of Jair Bolsonaro in the 2018 presidential elections, putting an end to the PT's rule that had lasted since 2004.

Petrobras is a huge majority-state-owned company, being Brazil's largest enterprise and a symbol of the country's entrenched economic nationalism. The scandal began in 2014 and involved dozens of high-level business people and politicians as part of a widespread investigation alleging that millions had been kicked back to officials of Petrobras and politicians, especially for members of the ruling PT (Sotero, 2018).

The malfeasance was revealed by a federal investigation called Lava Jato ("Car Wash"). The huge scheme to defraud Petrobras did not fully come to light,

however, until after the narrow reelection of President Rousseff in 2014. By the time of her second inauguration, Rousseff's approval rating had collapsed to 14 percent, with almost two-thirds of Brazilians blaming her for Petrobras's troubles. During the investigation, contracts to develop the so-called pre-salt oil reserves found offshore in 2007 came to light (Watts, 2017). Federal prosecutors also discovered mismanagement in the electricity-generating sector, in the pension funds for workers of state-owned companies, as well as in the Bank for Economic and Social Development (BNDES). The latter had provided billions of dollars in subsidized financing to Petrobras and other influential business owners, such as the billionaire Eike Batista, whose wealth plummeted spectacularly in 2013 (Sotero, 2018).

Given Petrobras's size and therefore the breadth of its reach within the country's economy, the company's tribulations would cut back Brazil's GDP by 0.75 percent in 2015 (Sotero, 2018). Therefore, the Brazilian economy plunged into a recession with strikingly climbing inflation. As a result, there was a deepening crisis of confidence coalesced around the perception of macroeconomic mismanagement by the Rousseff administration during its first term (Sotero, 2018). In early December 2014, the general popular discontentment, together with the strong support for the Federal investigation, led Rousseff to become the target of impeachment proceedings. However, those were not due to any alleged involvement within the Petrobras scandal but on charges suggesting she had improperly employed funds from state banks to mask budget shortfalls (Watts, 2017).

Testimony given under plea-bargain agreements by several individuals implicated that the Petrobras scandal, which included two former senior

managers of the corporation and therefore the CEO of one of the implicated construction companies, exposed a cartel-like criminal conspiracy founded and run from within the corporation after 2003 (Sotero 2018). Dilma Rousseff was, during that time, the chair of the company's board of directors as Minister of Mines and Energy and Chief of Staff of the Lula administration. For almost a decade, Petrobras' managers allegedly acted with senior executives of firms that supplied goods and services to Petrobras (including Brazil's largest construction companies) to inflate prices of Petrobras contracts for the non-public gain of the scheme's operators and to finance campaigns of dozens of politicians, mainly from the PT and its partners within the government coalition, most notably the Party of the Brazilian Democratic Movement (PMDB) (Prado & Carson, 2018; Lima-de-Oliveira, 2020).

According to Sotero (2018), more than 30 individuals were arrested during the Car Wash operation. By that time, over 50 members and former members of Congress had been targeted by prosecutors in criminal investigations—among them the president of the Senate, Renan Calheiros; the speaker of the Chamber of Deputies (the lower house of Brazil's legislature), Eduardo Cunha; and Lula's former Minister of Finance, Antonio Palocci, who served briefly as Rousseff's Chief of Staff before being ousted in a very separate lobbying scandal. Also targeted was the previous Minister of Mines and Energy in Rousseff's first term, Edison Lobão, a protégé of former president José Sarney, and former president Fernando Collor de Mello, who had returned as a senator from Alagoas a decade after his 1992 impeachment as president on corruption charges, of which he was later cleared by the Supreme Court.

Already in the second year of the investigation, public prosecutors had formally accused 110 people of corruption, concealment, and other financial crimes. On March 4, 2016, Lula's home was raided by police, and he was formally charged for having hidden his ownership of a seaside luxury apartment acquired because of his ties to a construction firm. Shortly after, together with Rousseff's extremely low popularity, the Ex-President named Lula her Chief of Staff, ostensibly to use his still-wide political influence to assist her during the country's depression. However, a federal judge both blocked Lula's appointment and released a wiretapped phone conversation between them, which arguably indicated that Rousseff had made the appointment to shield Lula from prosecution. That caused an immense public outrage so that more than 3 million Brazilians across the country joined protests calling for Rousseff's resignation or removal later that month (Época, 2016).

As of March 2015, several protests against the government brought together hundreds of thousands of people across the country to ask, among other demands, for the impeachment or the resignation of Rousseff (Mourão, 2019). Protest waves in Brazil started in 2013, with specific claims regarding bus fare rates, and unfolded to a broader discontent with the government of President Rousseff, especially after the narrow reelection of 2014 (Doval & Actis, 2016; Avritzer, 2017). In the beginning, these mass protests in 2013 could not be directly linked to any political parties or civil society organizations (Nunes & Melo, 2017). However, due to an increasing generalized opposition against the leftist government of the PT, the corruption scandals and economic crisis evolved into mass political demonstrations. Opposition elites supported the protest wave and, therefore, gained popularity and validation in mainstream media (Mourão, 2019).

The economic retraction, together with the unexpected political instability already in the first six months of Rousseff's second mandate, is an important reason for the unpopularity of the Head of State (Doval and Actis 2016). Besides, protests against the realization of the World Cup in 2014 accompanied the first arrests of the Car Wash Operation. As Nunes and Melo (2017: 285) highlighted, “[f]irst, the socio-economic profile of the protesters was always far from representative: surveys done by DataFolha showed that most protesters were older, highly educated, and with higher income.” Rousseff's low approval ratings reflected unpopularity in the whole political spectrum, but most notably among the conservatives. Even though there have always been conservative civil society actors in Brazil, these groups gained significant influence during the recent protest waves. Conservative groups increased their legitimacy during the protests in favor of the impeachment of President Rousseff. Most groups supported an anti-left and anti-corruption campaign, focusing on traditionalism and moral norms. Controversially, the same groups contributed to a high polarization of the political spectrum and the Brazilian society, with an ambivalent appeal for conservatism (as, for example, in the claims supporting military interventions) and democratic values against political malfeasance (Bülow, 2018).

The three main conservative civil society groups, namely, *Vem Pra Rua* (Come to the Streets), *Movimento Brasil Livre* (Movement Free Brazil), and the *Revoltados On-Line* (Rebels Online) organized protests in São Paulo, reinforcing their ideological differences despite their shared distaste towards Rousseff's government (Bedinelli & Martin, 2015). The first two groups were more moderate and advocated against corruption practices and impunity in the Brazilian government. Even though the groups claimed to have a non-partisan character, the protestors were opposed to both Lula and Dilma's mandates and defending a

minimum State intervention in the economy, as well as in civil society. Despite the alleged reason of these civil society groups for protesting was corruption, they did not occupy the streets later on after the accusations against Michel Temer and Eduardo Cunha came to light, suggesting that the protests were, in fact, ideologically motivated to end the PT's government era (Calegari, 2017b).

Nonetheless, the third group, *Revoltados On-Line*, was more conservative, inducing intense controversy surrounding these protests in favor of the impeachment of President Dilma Rousseff. Darlington (2015) wrote, "A sea of protesters dressed in the green and yellow of the Brazilian flag used decades-old rallying cries to fire up their ranks, singing rock songs that date back to protests of the country's one-time military dictatorship." The group also claimed to support a future candidacy of President Jair Bolsonaro, who would put the country back on track through military intervention. Jair Bolsonaro became infamous during the impeachment trial of President Rousseff, honoring Colonel Carlos Brilhante Ustra. As illustrated by Watts (2016)

arguably the lowest point was when Jair Bolsonaro, the far-right deputy from Rio de Janeiro, dedicated his *yes* vote to Carlos Brilhante Ustra, the colonel who headed the Doi-Codi torture unit during the dictatorship era. Rousseff, a former guerrilla, was among those tortured. Bolsonaro's move prompted left-wing deputy Jean Wyllys to spit towards him. Eduardo Bolsonaro, his son and also a deputy, used his time at the microphone to honor the general responsible for the military coup in 1964.

As a response to the public discontent, the PMDB, which was the most important party within the Chamber of Deputies, withdrew from the government's ruling coalition. Despite having been charged with corruption and concealment himself, PMDB's Cunha had become one of the strongest

advocates of Rousseff's impeachment on grounds associated with her government's allegedly unethical accounting practices. According to Nunes & Melo (2017: 286), "[c]ongressional opposition, movements against the government in civil society, and sectors of the media quickly saw him [Cunha] as the actor capable of interrupting the long PT cycle [in the government]."

Until September 2015, 37 impeachment requests were filed in the Chamber of Deputies against President Rousseff (Passarinho & Alegretti, 2015). Eduardo Cunha, the President of the Chamber of Deputies, was himself investigated in Operation Lava Jato by the Federal Police as well. The allegations consisted of Cunha receiving bribes from Petrobras and of keeping secret accounts in Switzerland. Consequently, Cunha was in danger of losing his mandate, as the Chamber's Ethics Council filed a lawsuit against him (Avritzer 2017). Rumors surfaced about attempts to reach an agreement between the deputy and the PT, in order to end this process, which he vigorously denied. If PT members announced their support for the loss of Cunha's mandate in the Ethics Council, he would accept the impeachment request as an instrument of blackmail (Passarinho & Alegretti, 2015).

However, Eduardo Cunha first accepted the request written by Hélio Bicudo and by lawyers Miguel Reale Júnior and Janaina Conceição Paschoal. The pro-impeachment social movements decided to adhere to Bicudo's request, which also had the support of right-wing parliamentarians and civil society, organizing a petition in support of the impeachment of the President of the Republic (Rios et al., 2017b; Bülow, 2018). In response to the opening of the case, Rousseff stated that the arguments presented by the lawyers were inconsistent and unfounded and that she had not performed any unlawful act (G1, 2016).

The formal impeachment proceedings of Dilma Rousseff, the 36th president of Brazil, started on December 2, 2015.² The process began with a petition filed by the justice prosecutor Hélio Bicudo and the two lawyers Miguel Reale Júnior and Janaína Paschoal (Fernandes, 2015). The petition was then accepted by the former president of the Chamber of Deputies, Eduardo Cunha. Rousseff was accused of criminal administrative misconduct and disregard for the federal budget. The petition claimed that she violated Article 85, items V and VI, of the Brazilian Constitution and also the Fiscal Responsibility Law, Article 36.³ Further, Rousseff was also accused of criminal responsibility for failing to act on the scandal at the Brazilian national petroleum company, Petrobras, on account of allegations uncovered by the Operation Car Wash investigation.

Former President Dilma Rousseff was president of the Petrobras board of directors during the period covered by the investigation. During her presidency, she approved Petrobras' controversial acquisition of the Pasadena Refining System (Nunes and Melo 2017). The primary concern was that the former president did not properly distance herself from the suspects in that investigation. Yet, the Petrobras charges were not (formally) included in the impeachment because Prosecutor-General Rodrigo Janot successfully argued that a sitting

² Nunes and Melo (2017) reinforce that, even though the impeachment process occurred on a legal basis, there were some credible conspiracy allegations. Besides, the allegations leading to the impeachment of President Rousseff accepted by Cunha were a common practice among politicians in Brazil. Joaquim Barbosa, who was the former Supreme Federal Court Minister – who punished the PT's leaders during previous corruption scandals – affirmed: “that was staged. All of the steps had already been planned since 2015. Those procedures there [in Parliament] were conducted only as a formality” (Bergamo 2016).

³ "Constituição da República Federativa do Brasil de 1988"[Constitution of the Federative Republic of Brazil 1988] (in Portuguese). Presidência da República do Brasil. 5 October 1988. Retrieved 9 June 2017. Art. 85: Acts of the President of the Republic which are counter to the Federal Constitution, and especially with respect to: V - probity of the administration; VI - budgetary law.

president could not be investigated while in office for crimes committed before the election.

As of the acceptance of the filed petition, a special commission was formed in the Chamber of Deputies to decide on its admissibility. The script started with the testimony of the plaintiffs and followed up with the presentation of her defense. Meanwhile, street demonstrations for and against the impeachment periodically took place across the country (Darlington, 2015; Mourão, 2019). The largest street protest in favor of the impeachment of President Rousseff counted on more than 500 thousand people. In comparison, a few days later, around 100 thousand people occupied the streets supporting the President and her mandate (Nunes and Melo 2017). The committee's report decided in favor of President Dilma's impeachment, with 38 deputies approving the report, while 27 expressed their opposition.

On April 17, 2016, the plenary of the Chamber of Deputies approved the report with 367 votes in favor and 137 against. Once formally impeached, the Senate subsequently voted to suspend Rousseff's powers for the duration of the trial, and Vice President Michel Temer became acting president. On August 31, 2016, the Senate removed President Rousseff from office by a 61–20 vote, finding her guilty of breaking Brazil's budget laws.

Appendix 17: Case study: The non-impeachment of Michel Temer (2017)

Michel Temer, Brazil's president, survived two impeachment attempts in August and October 2017. Here, we focus on the first impeachment attempt. The current literature explains this puzzle in terms of Temer providing concessions to the elite, thus buying their support, something that his predecessor, Dilma Rousseff, failed to do. While this argument is intuitive, we also highlight two factors. First is the lack of massive mobilization compared to that that erupted against Rousseff. The second factor lies in the fact that he was a temporary president, thus giving little incentive for the elite to impeach him. The elite, therefore, were able to buy time until his temporary term came to an end. In the lines below, we elaborate on this argument.

Temer actually served as Vice-President to Dilma Rousseff and was sworn in as the 37th president of Brazil in 2016 after the latter's impeachment. Temer's interim administration was involved in a scandal with Romero Jucá, a newly appointed minister and the president's confidant. Jucá was forced to step down amid accusations that he had sought to obstruct Operation Car Wash's investigations. This came to light after the press released a taped conversation in which he stated that "the government has to be changed in order to stop this

bleeding" (Sotero, 2018). Amid the scandal, many alleged that Jucá was proposing to use Rousseff as a scapegoat.

Temer was himself accused of corruption by an executive from the construction company Odebrecht of soliciting campaign donations in 2014 for his party, the PMDB (Rios et al., 2017a). He faced trial along with Rousseff in the Superior Electoral Court (TSE) in a complaint filed by Senator Aécio Neves, who was narrowly defeated by Rousseff in the 2014 presidential run-off election and complained of campaigning irregularities. On June 9, 2017, the court rejected the allegations in a 4–3 vote. Consequently, he remained in office, and both Temer and Rousseff were able to retain their political rights.

Temer's political power, nevertheless, grew increasingly tenuous as he became the target of another corruption scandal. In May 2017, a secretly recorded conversation between Temer and Joesley Batista, the chairman of a meatpacking company, was leaked. Temer was accused of approving an offer to bribe Cunha. Threatened with impeachment, Temer denied the accusations and refused to resign. In late June 2017, he was officially charged with corruption. However, two-thirds of the Chamber of Deputies had first to vote to suspend him from office to face trial. When the deputies voted on August 2, 2017, only 227 of 513 were in favor of impeaching Temer, not enough to proceed with the impeachment trial.

Temer's party, the PMDB, has been the largest in Brazil since the re-democratization period, with a broad base of support in the Chamber of Deputies. During the early stages of his trial, parties directed their deputies to vote against holding an impeachment trial. For example, the conservative deputy Aguinaldo Ribeiro, of the Progressive Party, said that he did not believe Temer was guilty, adding that "you don't mess with anyone's honor without having concrete proof" (Bretas & Gasparini, 2017). Another conservative congressman, Deputy José Rocha, said the PR is against impeachment, arguing that "no country that seeks prosperity can turn its back on the principles of institutional stability and legal security" (Bretas & Gasparini, 2017). It is worth noting that such logic and argumentation, nevertheless, did not resonate with the conservative parties during Rousseff's impeachment (Nunes & Melo, 2017).

Despite these accusations, there were no significant protests against Temer's government. Smaller demonstrations only occurred in 2017, mainly due to several budgetary cuts in ministries and other corruption scandals (Calegari, 2017a). While Temer's public approval ratings were dismal, especially as the October 2018 presidential elections approached, opinion polling showed Lula to be the leading candidate for the country's highest office. However, a few months before

the election, the STF denied a call for participation from Lula, prohibiting him from pursuing his final appeal options outside of prison.

References

- Avritzer, Leonardo** "The Rousseff impeachment and the crisis of democracy in Brazil." *Critical Policy Studies* **11.3** (2017): 352–357.
- Bedinelli, Talita and Martin, Maria** "Três grupos organizam os atos anti-Dilma, em meio a divergências (Three groups organize the anti-Dilma acts, amid disagreements)." *El País*, 2015. https://brasil.elpais.com/brasil/2015/03/13/politica/1426285527_427203.html. Accessed 6/4/2021.
- Bose, Meena and Burnett, Craig M.** "Public Approval, Policy Issues, and Partisanship in the American Presidency: Examining the 2019–2020 Trump Impeachment and Acquittal." *PS: Political Science & Politics* **55.2** (2022): 266–274.
- Bretas, Valéria and Gasparini, Claudia** "Como foi a votação que barrou a denúncia contra Temer na Câmara [How was the vote that blocked the complaint against Temer in the Chamber]." *Exame*, 2017. <https://exame.com/brasil/como-foi-a-votacao-que-barrou-a-denuncia-contra-temer-na-camara/>. Accessed 6/4/2021.
- Bringel, Breno and Pleyers, Geoffrey** "June 2013, Five Years Later: Polarization, Reconfiguration of Activism, and Challenges for the Brazilian Left. In: Miguel, L. F. & Puzone, V. (eds.) *The Brazilian Left in the 21st Century: Conflict and Conciliation in Peripheral Capitalism*. Cham: Springer International Publishing, Imprint: Palgrave Macmillan (2019), pp. 237–257.
- Bülow, Marisa von** "The Empowerment of Conservative Civil Society in Brazil. In: Youngs, R. (ed.) *The Mobilization of Conservative Civil Society*. Washington, D.C.: Carnegie Endowment for International Peace (2018), pp. 13–18.
- Calegari, Luiza** "Por que os protestos contra Temer continuam vazios? 3 hipóteses [Why do protests against Temer remain empty? 3 hypotheses]." *Exame*, 2017a. <https://exame.com/brasil/por-que-os-brasileiros-nao-protestam-contra-temer-tres-hipoteses/>. Accessed 6/4/2021.
- Calegari, Luiza** "Por que os protestos contra Temer continuam vazios? 3 hipóteses [Why do protests against Temer remain empty? 3 hypotheses]."

Exame, 2017b. <https://exame.com/brasil/por-que-os-brasileiros-nao-protestam-contratemer-tres-hipoteses/>. Accessed 6/4/2021.

Darlington, Shasta "Brazil protests push to impeach President." *CNN*, 2015. <http://edition.cnn.com/2015/04/12/americas/brazil-protests/>. Accessed 4/24/2021.

Doval, Gisela Pereyra and Actis, Esteban "The Political and Economic Instability of Dilma Rousseff's Second Government in Brazil: Between Impeachment and the Pragmatic Turn." *India Quarterly* **72.2** (2016): 120–131.

Época "As Manifestações de 13 de Março Em Todo o Brasil [The March 13 demonstrations across Brazil]." *ÉPOCA*, 2016. <https://epoca.oglobo.globo.com/tempo/noticia/2016/03/manifestacoes-de-13-de-marco-em-todo-o-brasil-acompanhe.html>. Accessed 5/20/2021.

Fernandes, Ana "Bicudo e Reale Jr. protocolam novo pedido de impeachment [Bicudo and Reale Jr. file a new impeachment request]." *Exame*, 2015. <https://exame.com/brasil/bicudo-e-reale-protocolam-novo-pedido-de-impeachment-e-evitam-falar-sobre-cunha/>. Accessed 6/20/2021.

G1 "Veja e leia a íntegra do discurso de Dilma Rousseff no Senado [See and read the full speech of Dilma Rousseff in the Senate]." *G1*, 2016. <http://g1.globo.com/politica/processo-de-impeachment-de-dilma/noticia/2016/08/veja-e-leia-integra-do-discurso-de-dilma-no-senado.html>. Accessed 6/20/2021.

Gerhardt, Michael J. "How Impeachment Works." *Missouri Law Review* **87.3** (2022): 743–767.

Hager, Anselm, Hensel, Lukas, Hermle, Johannes and Roth, Christopher "Group Size and Protest Mobilization across Movements and Countermovements." *American Political Science Review* **116.3** (2022): 1051–1066.

Healy, Gene "Be Careful What You Wish For: Impeachment in the Trump Era." *Missouri Law Review* **87.3** (2022): 769–779.

Heather Caygle, Bresnahan, John, **Ferris, Sarah, Desiderio, Andrew and Cheney, Kyle.** *Nancy Pelosi's long road to impeachment*: Politico (2019).

- Hollis-Brusky, Amanda** "Impeachment as a 'Madisonian Device' Reconsidered." *Chicago-Kent Law Review* **95.2** (2021): 498–517.
- Iyengar, Shanto** "The polarization of american politics." *The Routledge Handbook of Political Epistemology* (2021): 90–100.
- Jacobson, Gary C.** "Donald Trump and the Parties: Impeachment, Pandemic, Protest, and Electoral Politics in 2020." *Presidential Studies Quarterly* **50.4** (2020): 762–795.
- Lima-de-Oliveira, Renato** "Corruption and local content development: Assessing the impact of the Petrobras' scandal on recent policy changes in Brazil." *The Extractive Industries and Society* **7.2** (2020): 274–282.
- Limongi, Fernando** "O Passaporte de Cunha e o Impeachment - A Crônica de uma tragédia anunciada." *Novos estudos CEBRAP* (2015): 99–112.
- Mangan, Dan.** *Pelosi calls Trump 'clear and present danger to the nation' during impeachment debate, thanks National Guard*: CNBC (2021).
- Moreira, Roberta C. N., Vaz-de-Melo, Pedro O. S. and Pappa, Gisele L.** "Elite versus mass polarization on the Brazilian impeachment proceedings of 2016." *Social Network Analysis and Mining* **10.1** (2020).
- Mourão, Rachel R.** "From Mass to Elite Protests: News Coverage and the Evolution of Antigovernment Demonstrations in Brazil." *Mass Communication and Society* **22.1** (2019): 49–71.
- Myrick, Rachel and Wang, Chen** "Domestic Polarization and International Rivalry: How Adversaries Respond to America's Partisan Politics." *The Journal of Politics* **86.1** (2024): 141–157.
- Nunes, Felipe and Melo, Carlos Ranulfo** "Impeachment, Political Crisis and Democracy in Brazil." *Revista de Ciencia politica (Santiago)* **37.2** (2017): 281–304.
- Passarinho, Nathalia and Alegretti, Laís** "Para parlamentares do PT, decisão de Cunha reflete 'chantagem' e 'revanche' [For PT lawmakers, Cunha's decision reflects 'blackmail' and 'revenge']." *G1*, 2015. <http://g1.globo.com/politica/noticia/2015/12/para-parlamentares-do-pt-decisao-de-cunha-reflete-chantagem-e-revanche.html>. Accessed 6/20/2021.

- Prado, Mariana Mota and Carson, Lindsey** (2018) "Corruption Scandals, the Evolution of Anti-Corruption Institutions, and Their Impact on Brazil's Economy: The Oxford Handbook of the Brazilian Economy. <https://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780190499983.001.0001/oxfordhb-9780190499983-e-37>.
- Rios, Ricardo A., Lopes, Caio S., Sikansi, Fabio H. G., Pagliosa, Paulo A. and Mello, Rodrigo F. de** "Analyzing the Public Opinion on the Brazilian Political and Corruption Issues. In: *Brazilian Conference on Intelligent Systems (BRACIS)*: IEEE (2017a), pp. 13–18.
- Rios, Ricardo A., Lopes, Caio S., Sikansi, Fabio H. G., Pagliosa, Paulo A. and Mello, Rodrigo F. de** "Analyzing the Public Opinion on the Brazilian Political and Corruption Issues. In: *Brazilian Conference on Intelligent Systems (BRACIS)*: IEEE (2017b), pp. 13–18.
- Sotero, Pedro.** *Petrobras scandal*: Encyclopedia Britannica (2018).
- Vrydagh, Fanny and Jiménez-Martínez, César** "Talking with the right-wing: Pernicious polarization in Brazil and the philosophy of Paulo Freire." *International Communication Gazette* **82.5** (2020): 456–473.
- Watts, Jonathan** "Dilma Rousseff: Brazilian congress votes to impeach president: The Guardian, 2016. <http://www.theguardian.com/world/2016/apr/18/dilma-rousseff-congress-impeach-brazilian-president>. Accessed 6/3/2021.
- Watts, Jonathan** "Brazil: Explosive Recordings Implicate President Michel Temer in Bribery." *The Guardian*, 2017. <https://www.theguardian.com/world/2017/may/18/brazil-explosive-recordings-implicate-president-michel-temer-in-bribery>. Accessed 6/30/2021.